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An Address.[1]

By ANGUS MURRAY.

President, New South Wales Branch of the British Medical Association.

I THANK you for the honour bestowed upon me in allowing me to follow a line of distinguished predecessors as President of the New South Wales Branch of the Association. I assure you that in the coming year it will be my earnest endeavour to match their standard of service and to conduct your affairs with a comparable dignity and efficiency.

In casting around for a subject upon which to base my address, I had in mind the words of Francis Bacon: "Reading maketh a full man, conference a ready man, and writing an exact man." This last is a challenge and it is therefore with some temerity and with no claim to exactitude or authority, that I ask you to consider some aspects of the position of the Association in these days of rapid change in the social structure, of enormous expansion of scientific knowledge and practice, and of continued development of particular needs and interests by different sections of the profession.

We live in an age of revolution—physical and social. In the physical sphere we have seen the exploitation of resources locked for countless centuries in the bosom of the earth and cannot but be dismayed at the use to which man has put these new sources of power. We have been forced to realize how thin is the veneer of civilization separating us from raw barbarism when we consider the trail of devastation and misery left by the shattering convulsions of two world wars. And now we stand fearfully on the threshold of the Atomic Age knowing as yet only the hideously destructive power of this new genie, hoping for ultimate good, but wondering—if we are not first of all blown to smithereens—whether we are ushering in a further chapter which will see the gloomy predictions of Dr. Malthus realized in a frantic struggle for existence as the dwindling resources of this planet become increasingly incapable of meeting the demands of huge increases in population.

Tremendous changes have also taken place in the social structure which have not been without considerable effect upon the trend of medical practice. This egalitarian age has been called the "Century of the Common Man", and we as a profession are so intimately involved in the whole social fabric, that we must inevitably be affected by any change therein.

The temper of the times has favoured increasing interference with the lives of citizens, the destruction of individual initiative and the concentration of economic wealth in the State. This is a response to the demand for

[1] Read at the annual meeting of the New South Wales Branch of the British Medical Association on March 26, 1953.

economic security which rightly or wrongly is often regarded as an indispensable condition of real liberty. But it must be realized that independence of mind or strength of character is seldom to be found among those who lack the confidence that they can make their way by their own efforts. In the long run, society depends upon men and women, and John Stuart Mill has said: "A State which dwarfs its men, in order that they may be more docile instruments in its hands, even for beneficial purposes, will find that with small men no great thing can be accomplished." It is difficult to maintain freedom in the face of continual and relentless encroachment by the State and the fact must be faced that the more complex the form of the welfare State, the more restricted is the freedom of the individual. This was recognized by no other than Mussolini who said: "The more complicated the forms of civilization, the more restricted the freedom of the individual must become."

This touches the profession closely, and in this country at least, the Association has reason to be satisfied with the result of the determined stand recently made in defence of our right to practise in accordance with our cherished traditions. We must not, however, be oblivious of the fact that our position is still far from secure, that many threats to our chosen way of life—some foreseen and some necessarily unforeseen—still lie ahead. The call for unity in our ranks and wisdom in our leaders is every whit as demanding now as it was three years ago when we had tangible threats to face. We fought the threat of a nationalized medical service in the firm conviction that we were not only defending our own freedom, but also that of our patients. We have preserved the direct relationship of doctor to patient, and believe that the exclusion of any third party is essential to our freedom and in the best interests of our patients. This means that we are not public servants but we freely acknowledge ourselves to be servants of the public. There is no place in our ranks for the man who is not animated by some desire to serve his fellows and who is not prepared to give of his best in such service. It should therefore be our endeavour to see that this service is as efficient and comprehensive as possible, realizing that when a patient places the life and well-being of himself and his family in our hands we are in a position of trust that has no parallel in any other profession. In the modern planned society of regulated hours and labour we, almost alone, know no limits of time or effort. We have voluntarily undertaken a solemn responsibility and it is our bounden duty to see that we are always at our post, or that a satisfactory delegation of duty has been arranged. There have been too many instances quoted recently both in the Press and elsewhere of difficulty in obtaining the services of a doctor and this is a reflection upon the profession as a whole. It cannot be too strongly stressed that a failure in this respect is a betrayal of the traditions of the profession. It should also be our endeavour not to impose an over-heavy economic burden, and we must face the fact that the spectacular advances in medical science in the last few decades have also meant a marked increase in the cost of medical care, particularly in the fields of diagnosis and treatment.

We see no reason why the State should not assist the individual in providing for the more common hazards of life against which it is difficult to make adequate provision. We are fortunate that the present Minister for Health—a distinguished member of our profession—is in sympathy with this point of view and, against manifold difficulties, has endeavoured to achieve this object. As an Association, we have supported this policy, and while differing—sometimes strenuously—in regard to some facets have endeavoured to cooperate in building a structure on sound and enduring foundations. Without the support of the Association this would not be possible, and the strength and durability of the scheme are largely dependent on the strength of the Association. This leads to a consideration of some of the elements of strength and weakness in the Association and what effect present and future trends of practice may have thereon.

The fact that the Association represents the whole of the medical profession is the dominant feature in any consideration of its strength, and any fragmentation of the main structure must introduce a weakening element.

Arthur Koestler in "The Yogi and the Commissar" draws a striking word picture which may well be applied to the Association. He asks us to imagine an instrument which would break up patterns of social behaviour as the spectroscope of the physicist breaks up a beam of rays and looking through this to view the rainbow spectrum of all possible human attitudes to life.

On one end of the spectrum—the ultra-violet—crouches the yogi who believes that all change comes from within, bathed in an atmosphere of all-penetrating light but no heat. At the other end, the infra-red—we see the commissar who believes that all change comes from without, moving in the maximum amount of heat but with little light.

To borrow a phrase from antibiotic parlance, this "broad spectrum" conception of the Association should be our aim. The Association should occupy the centre of the spectrum and while covering all degrees of spectral displacement, whether to left or to right, should link up the extreme of passive contemplation with that of practical action. Just as both extremes are necessary to complete the spectrum, so should every type and variety of medical worker realise that without his inclusion in the Association, our claim to represent the whole of the profession is not justified.

With the constant development and expansion of new fields of medical work the cover of the Association has spread wider and ever wider over research workers and practitioners, whether specialist or general or members of the civil or the armed services. In the eyes of the public, however, there is a broad division of the profession into specialists and general practitioners. In Britain the introduction of the National Health Service has accentuated this division and it remains to be seen what effect this will have upon the functions and activities of the Association in years to come. The first fruits are already to be seen in the formation of a College of General Practitioners and it is difficult to foresee what impact this will have upon the future of the Association. On the face of things it appears that more than ever will the Association be the only common meeting ground between the new College on the one hand and the Royal Colleges on the other, and it is possible that its authority and prestige will be enhanced rather than otherwise by this new development. Danger lies in the intrusion of political rather than the professed academic and educational aims and it is possible that the Association may suffer in a battle of conflicting interests pursued by powerful bodies.

Any development which accentuates a divergence of the paths of the two branches is to be regretted, and stemming, as apparently it largely does, from the unhappy circumstances surrounding acceptance of the *National Health Service Act* should convey a warning to the profession here. In truth it may be said: "United we stand, divided we fall." The end-result of the exploitation of a division of opinion should be a powerful and ever-present reminder of the necessity for unity in our ranks so that this Association can with complete assurance and authority claim to represent the whole profession.

In Britain, those of us who have seen general practice functioning, realize that there was force in the warning given some thirty years ago by Dr. N. J. Horner, editor of the *British Medical Journal*, that the family doctor was in danger of becoming "a mere medical shopwalker indicating the appropriate department".

In this country, fortunately, such a warning loses force, and whereas in Britain there may be justification for establishing a College of General Practitioners "to ensure that the best achievements and traditions of general practice are preserved and that the best of future developments are encouraged", it would be difficult to justify such a step in Australia.

The conditions and needs of practice in this country of immense distances have evolved a distinctive type of general practitioner, who has graduated from the college of hard experience and is in every sense of the word an "all-rounder" of whom both his colleagues and his country may be proud. He is self-reliant and resourceful

and keeps abreast of advances in not one but several specialties to a degree that may shame some of us engaged in narrower fields of intensive cultivation. He does not claim to be a specialist and has the breadth of vision and the clinical sense to realize at what stage the services of a specialist may benefit his patient.

As to the specialist—recent years have seen the formation by the physicians and the surgeons of the Royal Australasian Colleges and of a Regional Council by the Royal College of Obstetricians and Gynæcologists. Other specialties have either established faculties under the wing of one of the Colleges or issue diplomas under searching and exacting conditions. This has undoubtedly raised the standard of specialist practice in this country, but however gratifying it may be to know that a specialist can be completely trained in his own country, it is to be hoped that the great and lasting benefits of overseas experience will not be lost sight of. The road to specialist practice is now so beset with hurdles to clear that a decision to set out thereon must of necessity be made at an early age, and there is occasion for regret in this fact. No longer is it easily possible for a man to graduate from general to specialist practice, and there will be an increasing number of specialists who have not had the opportunity of studying the patient in the background of his own home. This is a very real deficiency in the training of the specialist, and a period in general practice, apart from broadening his humanitarian outlook, would also lead to a better and possibly more sympathetic understanding of the problems his colleagues in general practice have to face. The physician in particular should know his patient in health as well as in disease, and possibly the recent appearance of psychosomatic medicine upon the stage is a tacit admission of a degree of failure in this respect. As it is now necessary for the surgical aspirant to undergo a period of apprenticeship to a senior, so would the young physician gain much by a period of apprenticeship in general practice.

Of necessity the active development of the Colleges has meant demands upon the time and interest of many whom we regard as leaders of the profession, and it is a matter for concern that in many cases this has meant a corresponding withdrawal from Association activities. There are outstanding instances in which the holding of high and responsible office in the Colleges has not been allowed to sever the thread of years of faithful service to the Association and we are indeed grateful that this is so. From time to time over the years the statement is made that there is a disproportionate representation of specialists on the Council. A subsequent analysis often shows that many of the specialists have also had wide experience in general practice; but it is admitedly difficult to devise a method of election by which an even balance of all interests is obtained.

The threat for the future, however, appears rather to be that difficulty may be experienced in inducing specialists to stand for election to the Council. This would be a grave misfortune for the Association, as apart from losing the benefit of their experience and advice on the Council, there would be a loss of authority and prestige in the representation of the Association's viewpoint in quarters outside the profession.

There is an analogy to be drawn between the respective roles of general practitioner and specialist to that of the infantry and the supporting branches of the services. No one will deny that the infantry bears the main brunt of the battle, but the man in the front line would be the first to admit that he would be in a sorry plight if his communications broke down and he could not be sure of support when and where it was needed.

The vital role of maintaining the lines of communication lies fairly and squarely upon the Association, and it is obvious that this cannot be effectively done without the whole-hearted support and cooperation of every section of medical practice.

In what manner may the lines of communication be maintained and improved is a question that should ever exercise the Council of this Association. The inquiring mind should be an inherent characteristic of the professional man, and the absence of such a stimulus can only mean the sure descent of twilight upon any profession. With what force must this apply to our calling in which we are engaged in the conflict of life and death and are confronted with matters of mystery that we are as yet unable to explain as matters of reason. Henry Adams is quoted by John Buchan as saying: "After all man knows mighty little, and may some day learn enough of his own ignorance to fall down and pray."

The slaking of the thirst for knowledge and the development and fostering of the inquiring mind should rank as a most important function of the Association, and in encouraging a free interchange of knowledge and experience between the various sections, a degree of unity could be achieved in a manner both complete and satisfactory. Two sources available to all members of which we may justly be proud, are THE MEDICAL JOURNAL OF AUSTRALIA, of which the consistently high standard maintained under its distinguished Editor is widely recognized, and the library of which both the material available and the outstanding services of the librarian are keenly appreciated by a wide and discerning circle of members.

Metropolitan members also have the opportunity to attend regular hospital clinical meetings, Branch and section meetings and to hear visiting lecturers. The availability of such services, however, to country areas, separated by vast distances, presents obvious physical difficulties.

A step in the right direction was made last year with the holding of a Branch meeting in the country and it is hoped that henceforth this will be a permanent arrangement. The success of a country week, organized by the Federation of Country Local Associations last year, should give us to consider whether the time is not ripe to pursue a more vigorous policy of post-graduate activity within the Association. Provision exists for the supply of British Medical Association lecturers on the request of local associations, but unfortunately such requests are few and far between. It would be to the benefit of all concerned, whether in city or country, if clinical discussions took a rather more prominent place in meetings of local associations. This is the practice in some areas and is surely to be encouraged. Not least would it benefit the specialist, who would learn something of the problems presented to his colleagues in general practice. The average attendance at meetings of most local associations is poor and possibly the knowledge that the meetings were to have a scientific flavour would stimulate interest in a healthy manner. Lack of interest and indifference to the affairs of the Association are unfortunately only too prevalent. John Buchan speaking on the peril of indifference remarks that: "Rust will crumble a metal where hammer blows will only harden it." This is borne out in the history of the Association where in the face of threats from an outside source the ranks of the profession stand united and resolute, but in times of comparative tranquillity it is a regrettable fact that many members take no part whatever in Association activities—even to the extent of reading the monthly notices. The reason usually given is lack of time rather than lack of interest. In the eyes of the public there are three ages of the doctor—he is too young, he is too busy and he is too old. The transition from the first stage is only too rapid, and before these days of high taxation proper and fitting arrangements could be made for the conduct of the third stage. As to the more prolonged second stage it is a truism that the more you do, the more you find you can do, and that precious though time may be, it should be possible without any undue sacrifice to spare some time and thought for the affairs of the Association, and not just rally around when personal interests are involved.

How often have we heard: "What do I get out of the B.M.A.?" The answer to this is: "What do I give to the B.M.A.?"—and this does not refer to pounds, shillings and pence. We get very much out of life what we put into it and this may well apply to every member of the profession, whether specialist or general practitioner. We have had something of a surfeit of medical politics in these last few years and it would be refreshing to see more regard paid to the clinical and scientific angle in future. The machinery

for carrying this out is already contained within our organization and a realization of this by members could lead to a revival of activity in a somewhat neglected field, possibly with far-reaching results as far as this Association is concerned. The Post-Graduate Committee in Medicine—and here tribute must be paid to the tireless energy and forcefulness of the Honorary Director—has done admirable service in the field of post-graduate education both for the specialist and the general practitioner, and it would be pleasing to support the Committee's efforts by further stimulating the interest of members in post-graduate education.

In this fashion also would all sections of the profession realize that the Association had ideals above and beyond the mere bread and butter level, and was conscious of the fact that the unity of its members was never more complete than when concerned with the art and practice of medicine.

Let us then keep our ranks closed and one and all bend our energies to the fulfilment of the aims of the Association: "The advancement of the medical and allied sciences and the upholding of the honour and interests of the profession." Above all, let us remember that the honour of the profession lies in the hands of the individual member and let us so conduct ourselves that our fellow citizens can say of the doctor in their midst as Martial said to Fabian:

> You're a man of learning, prudent, just;
> A man of courage, firm and fit for trust.

THE NERVOUS CHILD.[1]

By H. M. NORTH,
Assistant Director, School Medical Service, New South Wales.

I PROPOSE to deal with a large amorphous group whose symptoms are not definite enough to be dignified with such titles as anxiety neurosis *et cetera*. The mother will say that he is very highly strung or that his nerves are bad; that he is too sensitive; that he is prone to tears. It is usually agreed that he is babyish, but on the other hand it may be maintained that he is very grown-up and advanced. Fears and compulsions abound, but do not dominate the picture, so that a diagnosis of obsessional or compulsion neurosis would be quite out of place. Night terrors may be a feature. Anxiety symptoms such as tachycardia, nausea, vomiting, diarrhœa, frequency of micturition and asthma are commonplace, but have not yet crystallized into the consistency of the classical pattern. One has the impression that pyrexia will occur more readily and be of severer degree in response to minor infections. Diagnoses such as cyclical vomiting and allergic states are often made.

The teacher may complain that the child is restless, cannot concentrate or fix his attention. Various behaviour disorders may be added to the picture; habit disorders such as stammering, bed-wetting, nail-biting, skin-picking and masturbation appear from time to time.

Some authorities speak of the nervous child as being usually highly intelligent, but their impressions may have been coloured by the nature of their clientele. In my experience the feeble-minded figure as prominently as the superior, but the greater number is of average intelligence. Probably the proportion of bright and feeble-minded children is greater than the expected ratio, as adjustment is more difficult in the less average groups.

The question of heredity and inborn characteristics arises. The parent will say that "he is too highly strung, he takes that from me—he takes it from his father—our family are all highly strung". Yet when one observes the husky individuals into which many of these patients grow, the theory of inborn sensitivity loses weight. The parent may be right in insisting that he has been sensitive right from birth, for it is well known that an anxious, fussy mother may convey her tensions to a newborn baby.

These children are just too soft and give excessive emotional response to ordinary stimuli. They need to be toughened and to be assisted to acquire reasonable emotional control. This brings me to the morbific influence of the phrase used as my title, "The Nervous Child". When a parent is told that his child has bad nerves, it conveys to him that there is a disease process in very vital tissues. And disease calls for protection. With the added protection the subject becomes still more sensitive. Thus a vicious circle is established.

It is easy to tell a patient that his nerves are bad, for he feels that he is a subject for sympathy and solicitude. But it is very difficult to convey to him that he is emotionally ill; to do this requires much skill and tact as well as patience. Any suggestion that he has lost control of his emotions is abhorrent to the average person. Yet, if one can convey to the parent that his child is emotionally ill while the nervous system is organically quite sound, it produces an entirely different orientation. Instead of looking for direct intervention by the doctor, he will begin to seek for factors in the environment. He will want the doctor's help and guidance on many points; one must especially guard against a sudden change from coddling to a Spartan regime. One may point out that a limb which has been protected by a splint for any length of time will be very soft and sensitive at first. It will need carefully graded exercises until it gradually regains its strength and is able to function like the normal one. A hothouse plant, if suddenly exposed to the elements, will succumb; but if protection is withdrawn little by little the adaptation process will go on until the hothouse plant becomes as tough as the plant that grew outside from the beginning.

At this point it becomes necessary to consider the child's fundamental emotional needs and how they are being satisfied. It is inevitable that every growing organism should develop and unfold its latent powers. But if conditions are unfavourable, such unfolding will become distorted. Growth must come from within the organism and cannot be imposed from without. Given suitable conditions, the growth will be satisfactory.

Emotional growth, like physical growth, is likely to show philogenetic recapitulation. The infant comes into the world with the impulses of the jungle and by degrees these are integrated and built up into stable and civilized human sentiments. Further, the prevailing cultural and social qualities which vary in different national and racial groups and also from generation to generation are acquired. But for this to occur, certain needs must be satisfied. Emotional malnutrition and avitaminosis are just as real as their physical counterparts. Let us now consider some of these needs.

You will recall that we are not considering the neglected or rejected child, and the title, "the nervous child", should convey that we are concerned with minor rather than major psychopathology. I shall assume that we are dealing with the wanted child of reasonably stable and loving parents. Thus I shall be able to dispense with making a list of the major emotional deficiencies which are such commonplace themes in current literature, and devote the time at my disposal to consideration of relatively minor, but still very important, ones. Usually it will be convenient to approach my material from the positive angle by considering needs, blockage of which leads to deficiency disease. The first group of emotional needs may be conveniently considered under the heading of education.

Education.

The baby starts to learn right from the beginning. At first the learning process is necessarily purely instinctive Later parents begin to provide incentives and limits. Finally the child is sent to school. Thus, education may be divided into three categories, listed in chronological order of appearance and in descending order of importance: (*a*) instinctive education; (*b*) parental and home education; (*c*) formal education—that is, school, college, university *et cetera*.

[1] Read at a meeting of the Section of Neurology, Psychiatry and Neurosurgery of the New South Wales Branch of the British Medical Association on April 19, 1951.

Instinctive Education.—At the beginning, the baby's existence is largely vegetative, a major part of his time being spent in sleep. But the amount of time spent in experimental activity steadily increases. At first, the learning process is much concerned with the bodily orifices but not exclusively so. Between feeds and perhaps when he is beginning to feel hungry, he may apply his mouth to his hand. Generally it will be more convenient to bring the hand to the mouth. This involves motor and kinæsthetic learning. The knuckle applied to the mouth may not taste so very different to the nipple; but sensation of warmth and moisture occur in his hand, whereas he received no similar sensations from the nipple. This places his hand and the nipple in different categories and gives him the first faint glimmering of the differentiation of self.

In the second and third years there is a fever of activity in educating the senses and the manipulative processes. Agatha Bowley (1947) says:

> Much of the early pre-school period is devoted to acquiring bodily skills. To anyone unfamiliar with little children, a walk with a two-year-old is a revelation in itself. Every enticing flight of steps, every narrow ledge, every muddy puddle, every pile of leaves invites exploration, and suggests jumping, climbing or balancing activities. Climbing is particularly popular, and if there are no safe trees or five-barred gates available, the jungle "gym" of the nursery school has a great deal to recommend it. As the child grows, running becomes more secure, and falls are less frequent. Balancing and jumping and all kinds of activities with boxes and bricks and planks are practised again and again with great relish. Hopping, skipping and dancing soon become part of the repertoire of the three-year-old and four-year-old. This general development of bodily skills not only increases muscular control, but also fosters self-confidence, independence and self-reliance. This in turn assists emotional development. It is very noticeable that the neurotic, anxious child does not use his limbs and muscles and usually appears tense or timid.
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> The corollary should be evident to every mother and teacher who wishes to aid the little child's general development. Give him materials, space, opportunity and encouragement. The mother whose conversation to the child consists of "Careful!" "You'll tumble!" "You'll hurt yourself!" "You'll only cry." "No don't touch!" "Walk properly and hold my hand!" "Keep still!", is not giving the right kind of encouragement to the development of either muscular or emotional control. The wise parent provides opportunity and encouragement and materials and then stands by to offer help only as required. How often the two-year-old begs "let me do it myself", and how he will scream and storm when he is prevented or carried when he would rather walk. Tumbles are of course bound to occur from time to time. They are part of the child's learning process by which he gains caution, but they are not likely to be serious if careful supervision is given.

He is learning not only motor coordination, but he is undergoing an intensive sense training. From two and a half years on he shows an increasing interest in all kinds of sense training toys.

Even visceral training is intensive. Before the end of the first year he begins to experiment with more sophisticated foods than his balanced milk ration. Much tact and resource will be needed on the mother's part to exploit appetite and hunger and to avoid showing her anxiety with too rigorous a schedule. At this stage the infant often learns the value of negativism in dominating the household. When self-assertion becomes the guiding motive, hunger is often forgotten. Appetite may also be prejudiced by lack of balance and too ostentatious an insistence on greens. Additional meat and other sources of first-class globulins often prove an effective stimulus.

By this time the child will have acquired the concept of "I" and will be able to conceive of himself as an individual, in contrast with his earlier infantile egocentricity. He should be respected as a person with his individual rights, and he should never hear himself discussed by adults. The tone of speech will convey much more to his limited comprehension than the words he hears. Generally he will take far more notice of what he hears said about him than of what is said to him, for he will feel important in being discussed, hence there is likelihood of his developing an unhealthy self-awareness.

The learning processes that are going on result in adaptations. As his activities increase, parents must set limits, if only for the child's protection. They also apply incentives by their conversation, by introducing him to company, animals and natural objects and by provision of toys. Many mistakes can be made, vitiating the educational process and leading to faulty adaptations. One common mistake results in an unhealthy stimulation when a proud parent derives satisfaction from showing off the young hopeful. An artificial situation can easily be created for the youngster, to which he adapts himself by pleasing the adults around him instead of coping with realities. The maturation process is inhibited and he is less capable of holding his own with other children. He becomes fearful and by the mechanism of displacement of the affect, seemingly absurd fears arise.

The acquisition of language is a good example of the interaction of the innate tendency and of the cultural environment. There is an increasing urge to speak, but he is ready to accept whatever language is used by those around him. Some children even submit to the strain of bilingualism.

Parental or Home Education.—From the foregoing it will be seen how parental education gradually merges into instinctive education and how the parent interferes more and more by setting limits or providing incentives. It will be realized how such interference may be more harassing than helpful and how the parent may require advice at any stage. The parent may easily become very perplexed even though there is no inhibition on account of undue emotional involvement. Such interference may be dictated by considerations of protection and convenience rather than for education.

The category of parental education should be reserved for those areas where the parent sets out intentionally to teach the child. Every mother knows that she must train her baby in sphincter control and later teach him to dress himself, to wash himself and to use table implements. She must also teach him social decorum and conformity. The list might be multiplied.

I propose to deal with only one area because it is so important and so often forgotten, namely that of property. In the first place, it is necessary to point out that property is purely a social institution, whereas parents so often insist that it should be inherent or instinctive. Thus property education will vary according to the property mores of the community concerned. I presume that it would need to be very different in our community from that in a community behind the "iron curtain"; and still more so in one of the Pacific islands.

So often a parent will state blandly that money means nothing to his or her teen-age child; this is surely an alarming statement in a community where property bulks so largely as in ours.

The sooner a child learns the lesson that he cannot spend his money and have it as well, the better for his social adjustment. A limited allowance at the beginning of the week is an excellent device, if no one comes to the child's aid in the event of his improvidence. If he has squandered his money early in the week and has to forgo something very desirable in consequence, he will be more careful next time. The child is punished most effectively when he punishes himself. When he can pass the tuck shop or the comic shop to save his penny for a more important occasion, he is learning to say "no" to himself; he is mastering his impulses and is therefore growing in emotional control.

There can be little distinction between mine and thine until the child has property of his own. The wise parent does not delay until the child has been irresponsible before he commences property education.

Formal Education.—This is a large theme and it would be unsuitable to attempt to develop it here. I shall limit myself to negative aspects for the most part. In a State which provides universal compulsory education, parents are apt to feel that they may leave it all to the schools,

while they attend only to physical well-being and material needs. Intensive health education as carried out today accentuates rather than relieves this attitude.

Then, there is often far too much emphasis on scholastic achievement, especially in the infant and primary grades; it should be remembered that these grades are largely concerned with teaching the child how to learn rather than with learning for its own sake. It should also be remembered that education is always a preparation for life and never an end in itself. Sometimes a proud parent will report that young hopeful could recite all his nursery rhymes before he was two years old, and that he was reading quite sizeable books before he started school at five years. Soon there is a slump. The teacher says he has ability but cannot concentrate; it is impossible to hold his attention except through the motive of self-display. All his instinctive education has been sacrificed for the sake of a barren accomplishment which could have been achieved at so little cost at a later stage if the natural order of development had been observed.

The Process of Development.

Development should cover a gradual progress from complete dependence towards full independence. There is nothing as helpless as the newborn baby; his mother cannot leave him for a moment, but must attend him more or less constantly. Then comes the weaning; and I need not go into all the evils which may flow from an unwillingness to face this milestone. From that time forward the infant needs to be weaned in one way or another with every month and year that passes. If the child is kept babyish he will remain emotionally immature and unable to face the demands of life. He is likely to be timid and fearful but also demonstrative and appealing, always seeking someone on whom to depend. As the child grows older the wise parent will reserve interference for major matters and leave the child to rely on himself in coping with minor problems, even if the solution is not all that could be desired.

Sometimes the parent mistakes precocity for self-reliance. The child may want to interfere in everything that elders are doing but be unable to carry out the most elementary task on his own. It is a universal weakness to want to skip grades and one that appears very early. The mentality of the office boy who wants to tell the management and officials how to do their jobs, but resents the duties of an office boy, appears already in the nursery. Then, the infant is naturally imitative and unless suitably guided will want to do things in the same way as his elders. He must be content to start at the beginning and to learn step by step. He should not be permitted to acquire the interests of his elders at the expense of the normal activities of a small child.

Next comes the need for companionship. Human beings are social creatures and need to live together. All social creatures have to learn to limit themselves in various ways for the sake of their neighbours. It was Darwin who pointed out that the solitary bee builds a cylindrical cell, which is really the most comfortable; the hive bee builds a hexagon-shaped cell to fit in with her neighbours. So human beings all have to learn to limit themselves in various ways for the sake of other members of the community.

It is well to remember, however, especially in these days of small families, that adults cannot serve as companions to children, for there can be no equality in the relationship. Satisfactory social adjustment can be achieved only through the give and take association of peers.

The foregoing indicates various needs of the growing child, the deprivation of which may lead to "nervousness". The list could be considerably refined and expanded, but the indications for treatment by environmental manipulation are obvious. It is fortunate that the impulse to grow and develop is ever present and when the inhibiting factors are removed progress is usually rapid.

Reference.

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SOME ASPECTS OF THE LIFE AND WORK OF JAMES GEORGE BEANEY.

By BRYAN GANDEVIA,
Melbourne.

View but his picture in this tragic glass,
And then applaud his fortune as you please.

Christopher Marlowe: Prologue
to *Tamburlaine the Great.*

THE astounding career of Ibsen's Peer Gynt, who rapidly became the "Crœsus of Charlestown" from humble beginnings, is paralleled in some respects by the equally remarkable career of the Honourable James George Beaney, M.L.C., M.D. (*a.e.g.*) (Melbourne), F.R.C.S. (Edinburgh); Honorary and Consulting Surgeon to the Melbourne Hospital; Demonstrator of Operative Surgery at the Melbourne Hospital; Clinical Student of Syphilography at the Lock Hospital, Edinburgh; Member of the Royal and Medical Societies of Victoria; Surgeon on the Staff of the Royal Victorian Artillery Regiment; formerly Assistant Surgeon to, and for some time in medical charge of, the Third Royal Lancashire Regiment of Infantry in the Mediterranean; and Acting Surgeon to Her Majesty's Troops, on full pay, during the Crimean War. Most of these titles are to be found on the title pages of one or other of his works.

Before proceeding to consider certain aspects of Beaney's life and work in order to assess more precisely the position he should occupy in the history of colonial medicine, two points should be stressed. First, no statement is made without the support of carefully checked and documented evidence selected from the wealth of material available in the contemporary medical and lay journals. Secondly, with the exception of excerpts from the memoirs of Dr. G. T. Howard, all the references used in this article were published in Beaney's lifetime. During the period of preparation, the writer has, he hopes, made due allowance for the prejudice and bias against Beaney which existed in many quarters, and for this reason an appraisal of the status, reliability and origin of each of the medical sources was undertaken as a preliminary step (Gandevia, 1952*b*).

His "Autobiography".

On February 15, 1826, Beaney was born in Canterbury, Kent, and this event is commemorated by a tablet erected to his memory in the city's cathedral. His autobiography was published in *The Illustrated Australian Mail*, probably in the early 1860's, but unfortunately efforts to locate a copy of this journal have been unsuccessful. Only a few extracts survive (*Melbourne Medical Record*, 1875; *Medical and Surgical Review* (Australasian), 1863). The evidence of Mr. Edgar Ray, proprietor of *The Mail*, in the case of Beaney *v.* Fitzgerald (1863), indicates that Beaney accepted an offer of £30 for a biography and portrait, and that these were subsequently published under the caption "Medical Celebrities of Victoria, No. 1". Of the list of publications purporting to be written by "that eminent medical practitioner" (as he described himself) it is an amusing paradox that the only well-authenticated example should have been published anonymously.

Beaney stated that "through intense application to his [medical] studies" in England his health broke down, necessitating a long sea voyage. So it came about that in October, 1852, he took up residence in Melbourne with the Honourable John Hood, M.L.C., who owned a chemist's shop in Collins Street. Here his phraseology is more circumlocutory than that of his critics, who affirm that he served there behind the counter, "pounding pills or washing bottles". His health becoming worse, he returned to England in the following year, where it improved so that he was able to take his diploma at the Royal College of Surgeons, Edinburgh, in June, 1855. His detractors remarked that "even this examination became notoriously lax" with the shortage of surgeons during the Crimean War.

He was appointed assistant surgeon to the Third Royal Lancashire Regiment of Infantry, "one of those brave regiments of militia which volunteered for foreign service during the Crimean War". However, as the regiment appeared unlikely to get closer to the front than Gibraltar, he transferred to the Turkish contingent, "those brave companions in arms who were invading the stronghold of Russia in the Black Sea". In the Medical Directory, Beaney described this appointment "Staff Surgeon Turkish Army during Crimean War, with medal". This medal, details of which are uncertain, was the subject of many satirical jests in later years. It can be seen on his "milingtary buzzum" —for so we are assured he pronounced these words—in Figure I. One version of the events leading to the award states:

> Is it to be wondered at that when it [Beaney] was leaving, the Sultan and Omar Pacha sat down and cried in chorus "Oh, Jimmy, we shall miss you", and that one of them slipt a two shilling piece into its hand and whispered "buy a Turkish medal at Malta and wear it in remembrance of me"; and of me also said the other.

Continuing his autobiography, Beaney remarked that he "landed in the Crimea during the most momentous operations of that campaign, and was present with the allied forces during the siege and fall of Sebastopol". His opponents soon pointed out that actually he was at Gibraltar during these "momentous operations", but it was doubly unfortunate for Beaney that defendant's counsel should be the one to draw attention to this error during the course of the action brought by Beaney against Thomas Fitzgerald, a leading surgeon of the day. The basis of the claim was that on being requested by a patient (suffering from Bright's disease) to call Dr. Beaney in consultation, Fitzgerald refused, allegedly stating that Beaney "had bought up his votes at the Hospital, and that he was an advertising doctor, and that it was generally believed his Diploma was no good . . . no regular practitioner would have anything to do with such a man as Dr. Beaney". The defendant denied having made the statement, except as regards the advertising doctor, which he was prepared to justify. The jury was unable to agree and it is believed the case was subsequently dismissed. Although it reflects little credit on either side, it is a valuable case historically, for, as well as establishing the authorship of the biography, it defines the part played by Beaney in the war. He was forced to publish in the daily Press a notice acknowledging that he had not sailed for Sebastopol until three months after it had fallen and attributing the mistake to a "small typographical error", his original notes having referred to his arrival "during the blowing up of the docks and forts of Sebastopol", which took place when peace was declared. This explanation was regarded critically by the editor of *The Medical and Surgical Review*, who, after noting the shock which *The Mail* must have occasioned Beaney's "retiring modesty", continued:

> It is indeed fortunate for Mr. Beaney's equanimity that he did not earlier discover the *unprecedented* typographical (?) substitution he now complains of. Had he done so his temper would necessarily have been so ruffled that nothing but the lapse of time could have restored the "kind and conciliating manner in the sick room" of which he speaks (in the biography), and nothing but his "self-reliance" could have preserved his "acute perception of disease and his rapid and reliable diagnosis".

Considered in all its aspects, the autobiography is an illuminating but inauspicious beginning to Beaney's literary career.

His Personality.

Innumerable contemporary references illustrate various facets of the personality of this notable surgeon, and it would be wise to consider some of them before attempting to form an estimate of his work.

Many incidents bear witness to his inordinate vanity and egoism, even if the constant use of the first person singular in his books—in relation to successful cases—is discounted. Among these may be mentioned the public display of the large stone removed from the bladder of Robert Berth, and the exhibition of his new watch. The latter prompted the following letter to the *Melbourne Medical Record*:

> Sir,
>
> Messrs. Denis, of Bourke St., have been showing a diamond and gold watch chain, manufactured in this city. "The diamonds are in double rows in each link, and are set in open gold work, designated by the very clever workman who executed it the Queen's Scroll. The cost of this gorgeous specimen of Jeweller's ware is £1000, and is to be exhibited for a day or two . . . to show what excellent work of this kind can be turned out in Melbourne."
>
> The owner of this "gorgeous" toy—already bedecked like one of the mothers of Israel after the moonlight flitting from Egypt—has done more for circulating cheap jewellry than any other individual in the colony. Such an encourager deserves a niche in the temple of fame. During life his brilliancy will need no puffing, but after death he may want an epitaph. This is at his service—
>
> Here the great Jelly-belly Jimmy *lies*
> As great in pud'ins and jewels as ever;
> Australia may get a Surgeon and an Author as wise
> But one with so much "puff" and paste on—never.
>
> Yours respectfully,
>
> SCALPEL.

It might be mentioned that "Scalpel" was a frequent and somewhat bitter writer of letters to editors.

This episode illustrates two further characteristics—his love of personal adornment and his infinite capacity for self-advertisement, or "puffing" as it was colloquially termed. In the latter he was aided and abetted by Baillière, Beaney's publisher (Craig, 1950), but even so it frequently misfired. Before Beaney went to England in 1878, Baillière organized and widely advertised a huge sale of Beaney's goods. After his return, Beaney was campaigning for election to the Legislative Council when it was found that he did not own sufficient property to qualify for nomination, and he was forced to withdraw. It is interesting to note that he subsequently secured election, following the expenditure of large sums of money in his campaign, and in 1886 was chairman of the Commission which inquired into the advisability of changing the site of the Melbourne Hospital. A verse from a parody to the tune of "Golden Wedding", sung by the medical students at a theatre night at the Royal in 1884, alludes to Beaney's weakness:

> James George Beaney played his own fiddle,
> Allen banged the old tambo,
> While Prof. Kirkland twanged selections
> On his favourite old banjo.
>
> (Steele Robertson, 1889.)

The late Dr. G. T. Howard (unpublished manuscript), one of Beaney's residents, describes him as

> a short podgy man: hair brushed up at each side and parted in the middle as if he were wearing a pair of horns: little pads under the eyes: tuft of hair on the chin: cheeks streaked with small veins: pale blue rather shifty eyes—quite devoid of the dignity of Fitz [Fitzgerald] and James.

Howard vouches for the near accuracy of a visiting Frenchman's description which runs (in part):

> With the links of his [watch] chain you could tie up a little dog. In the attached pendant hangs a large diamond. His vest is low cut displaying three large diamond studs; and he wears several rings with diamonds and rubies. Altogether, with them all on he must be worth £10,000. They say he must be a good doctor because he has so much money.

Dr. Howard refers to Beaney's surprise when a patient rejected his offer of champagne in favour of a cup of tea. "'Augh, tea', he snorted—and then jauntily to us, 'I am becoming quite continental in my habits. I take a bottle of claret for breakfast, a small bottle of fizz for lunch and a big bottle for dinner', and he gently stroked a very obvious protuberance".

Beaney was given several complimentary dinners, but some doubt is cast on their spontaneity by virtue of a statement in the *Medical Record* that Beaney had con-

tributed £160 towards one which was shortly to be held, in case some of his friends were reluctant to part with the necessary guinea to attend. Nevertheless, the dinner given to him to celebrate the vindication of his management of Berth's calculus was presided over by no less a person than the Mayor of Melbourne.

Dr. Howard remarks that he had many redeeming features, one of which was his open-handed generosity. This outstanding quality of Beaney's character has become almost legendary in Melbourne to the present day. Beaney's bequest of £3900 for scholarships in surgery and pathology was the first which the Medical School had received, despite its thirty years of existence, and it remains one of the most liberal endowments (Scott, 1936). His provision of champagne for the onlookers at the conclusion of an operation is well known (Upjohn, 1948). *Speculum* (the journal of the Melbourne Medical Students' Society) records his champagne dinners for his dressers, and his offer of a pocket case of instruments to the dresser who kept the best notes of cases under his care. For some years he provided medals as prizes for work in surgery. At least one magnificent gold watch, presented, suitably inscribed, to a lay assistant in recognition of his services, is still keeping good time. Doubtless many instances of his generosity passed unrecorded.

His "Authorship".

It remains to consider the question of the authorship of the numerous articles and books published by Beaney. We have the authority of Beaney's publisher, Baillière, for the statement that two of his addresses ("The History and Progress of Surgery", and another unnamed) were written by an amanuensis (Craig, 1950). Baillière himself was apparently a man of few business scruples, as the following paragraph from the *Medical Record* suggests:

> The Editor of the *Maryborough Advertizer* makes the following observations: "We have been asked to review a work (recently issued by Mr. F. F. Baillière, of Melbourne) in accordance with the terms of a paragraph sent to us, and an advertizement has been forwarded to us for insertion with the paragraph. When both appear we are told that a copy of the work (already reviewed) will be forwarded to us for review" . . . . The contributed paragraph seems to have appeared, in various shapes, in many of the country papers. The work referred to is one on the Diseases of the Generative System.

This is a work of Beaney's, the first edition of which appeared in 1872 and the third in 1877.

Further evidence that Beaney wrote few, if any, of the publications attributed to him is to be found in the *Melbourne Medical Record*, chiefly for the year 1875. Since this publication was violently anti-Beaney for most of its existence, it is necessary to assess briefly its position and reliability. Its editorship is unknown, and no definite clue is offered by its contents. In addition to scathing editorials —particularly those concerning Beaney—there was a regular column signed "Pill Box" and headed "Gossip", although "Scandal" would have been an understatement of the nature of the contents. The column is of great interest, since in it at one time or another most of the leading practitioners of the day were attacked in trenchant style, thus at least indicating an open mind and a happy lack of bias. The *Medical Record* did not hesitate to state in no uncertain terms that Beaney expended four or five hundred pounds in obtaining dummy votes at the recent Melbourne Hospital elections, that his total expenses in the campaign were in the vicinity of £1500, and that he did not write the books to which his name was subscribed. Beaney was accused of "contract practice" whereby he undertook to cure the patient for the highest possible fee which could be established by a process of bargaining. It invited Beaney to take action against it, but this was never done, although many of the remarks appear outrageous to present-day readers, even granted some measure of truth. Confirmatory evidence is in some instances available in *The Argus*, while the Medical Society of Victoria—admittedly probably jealous of Beaney's popular reputation and extensive practice—and *The Australian Medical Journal* (its official organ) were also critical of Beaney's work.

The first significant reference is in the issue of May 15, 1875, where an editorial article, the seventh of a revealing series on "The State of the Profession in Victoria", is headed "A Great Author Who Plagiarises Other Men's Works". It is devoted to a review of Beaney's "Syphilis, Its Nature and Diffusion Popularly Considered", and claims to show that the book is simply a paraphrased version of

FIGURE I.

The caricature of Beaney reproduced on several occasions in the *Melbourne Medical Record* during 1875. The caption read, in part: "What a doctor should wear—The full suit one guinea—with the diamonds 25s."

a translation of a German work—"The Venereal Diseases: Their Pathological Nature, Correct Diagnosis and Homœopathic Treatment etc.", by G. H. G. Jahr, M.D. The issue of May 22 is missing, but on May 29 there is a review of "Spermatorrhœa, in its Physiological, Medical and Legal Aspects", of which it is said:

> There is so little of the ostensible author in it that we cannot but think that the liberal salary of two pounds per week, which he then paid his amanuensis, must have dulled the poor fellow's inventive genius.

On August 21, 1875, the following paragraph appeared on the front page:

> We have before us a paper purporting to be drawn up by a writer of other men's works. In it certain state-

ments are made which justice demands that the gentleman whose name is implicated should have an opportunity of refuting. We suppress the names. "I . . . M.D., now on my sick bed and in great danger, do solemnly and sincerely declare that I wrote all the books [naming four] bearing the name of .... I declare that I wrote every line of original matter in them—including dedications and prefaces. I also declare that he instructed me to introduce false cases in them; of which the work on . . . contains a great number, which were framed on models supplied to me by him from the European Medical Journals.

I make this known on account of the scandalous treatment I *since* received at his hands.

The above is true in all respects, So help me God.

Signature .....

Witnesses to Signature .....

March 30th, 1873.

If this be true—we can scarcely believe that a gentleman who has served with Her Majesty's troops in the Crimean War, on full pay, could descend to play the part of a Daw in borrowed plumes,—the sooner he is struck off the rolls of the College he belongs to the better for its reputation.

In the same issue—and for some weeks following—appeared an advertisement headed "The Late Dr. Hickson's Compilations", followed by a list of four works ("Syphilis, Its Nature and Diffusion Popularly Considered"; "Constitutional Syphilis"; "The Generative System"; "Children, Their Treatment in Health and Disease"). All four are usually regarded as the works of James George Beaney. A list of satirical Press opinions on these publications was appended. In numerous paragraphs in subsequent issues there are similar allusions to the question of the authorship of Beaney's books, but Beaney refrained from accepting the openly stated challenge to take legal action, and, in fact, from making any public comment.

The same theme is to be found in the cartoon (Figure I) which first appeared in June, 1875, shortly before the publication of the above statement. It must have proved a best-seller, for it was also reproduced in successive issues. On August 14 another caricature (Figure II) was published to coincide with the Melbourne Hospital election (of the honorary medical staff) which took place later in the same week. However, the *Medical Record*'s campaign against Beaney was unsuccessful and he was returned at the top

FIGURE II.

As part of its campaign to oppose Beaney this cartoon was printed in the *Melbourne Medical Record* on the eve of the Melbourne Hospital elections in 1875. This was accompanied by a lengthy "poem" entitled "Champagne Jimmy".

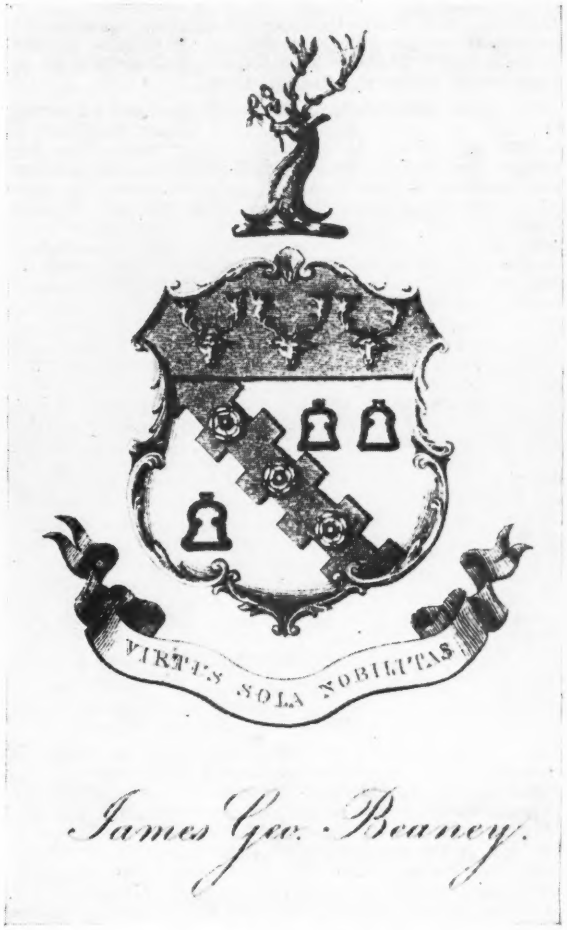

FIGURE III.

Beaney's bookplate, taken from a copy of "A Course of Operative Surgery" by C. R. Heath, F.R.C.S. (1877), in the library of the Medical Society of Victoria.

of the poll—by virtue of which, much to the annoyance of a section of the profession, he subsequently styled himself "Senior Surgeon" to the hospital.

Reference to the bibliography (Appendix I) shows that Beaney published no major work on any new topic after 1873, for he had already contributed articles on diseases of the hip, bony ankylosis of joints and urethral stricture to *The Australian Medical Journal*, *The Medical Record of Australia* and *The Medical and Surgical Review* (Australasian). His detailed monograph on anæsthesia in the last-named journal was preceded by a chapter on the same subject in his first book, "Original Contributions to Conservative Surgery" (Russell, 1938).

There is no direct evidence that this initial and important work was written by an amanuensis. Beaney published it in 1859, at the age of thirty-three, four years after his commencing practice. This claimed to be "the first medical book produced in these colonies", but a reviewer (*The Australian Medical Journal*, January, 1860) pointed out that a book "which really had the merit of originality" was published some years earlier extolling the virtues of a certain pill sold by an advertising doctor. The review is scathing, and does not suggest that anyone but Beaney was the author. Attention was drawn—by the reviewer and a subsequent correspondent—to several grammatical errors, faulty construction, and incorrect use of Latin and French phrases. "Clericus", in the same journal, pointed out the two errors in the sentence "The Chinese, who anticipated Caxton in the art of printing as well as the discovery of gunpowder, have also preceded us in the induction of anæsthesia by inhalation". Other sources also suggest that Beaney was not particularly fluent in the use of English. Reference to two of Hickson's works does not indicate a similar lack of appreciation of English grammar, so that perhaps the adverse criticism of his first attempt induced him to employ an amanuensis. Incidentally, this practice was apparently prevalent during this period, and the same editorial which exposed Beaney excused the busy practitioner who sought aid "from men whose business it is to put phrases together". Even *The Lancet*, in 1860, published the advertisement of a gentleman who would sell the copyright of several original works "now ready for the press".

His Surgery.

At this distance it is difficult to form any reliable estimate of the standard of Beaney's surgery. Many statements in the contemporary journals are so modified by personal bias that they do not merit unqualified acceptance, whether they are in favour of or against Dr. Beaney's methods. In the cases of Mary Lewis, Robert Berth (Craig, 1950) and Michael Barry (Gandevia, 1952*a*) a great deal of surgical detail is recorded, but the introduction of irrelevancies and personalities into the discussion makes assessment of the surgical skill involved unreliable. On Beaney's more strictly surgical articles, for example, those on the surgery of the hip and knee and on stricture of the urethra, the present writer is not qualified to comment. However, it is important to note that these are precisely the articles for which there is no direct evidence that they were written by an amanuensis. The editor of the *Melbourne Medical Record* (Dr. C. E. Reeves, a friend of Beaney), in expressing his appreciation of Mr. Beaney's contributions, showed no sign that they might not be genuine.

Under these circumstances, Dr. Howard's remark that "as for his surgery, it was in some instances very daring and successful, but generally speaking, it was very much below the average of Fitzgerald and James" becomes invaluable. Such an appreciation accounts for the considerable differences of opinion expressed and is in accord with the available evidence, and in particular with the personality of the surgeon. It would also explain in large measure why he enjoyed the confidence of a considerable section of the public in the face of the open antagonism of many influential members of the profession. To be rated lower than his rival, Fitzgerald, does not necessarily imply any lack of ability, for Fitzgerald was one of the most adept technicians of his day.

Conclusion.

It would be most unjust to conclude this brief survey of several aspects of Beaney's life and work without reference to the times in which he lived. The spirit of competition in the profession in Melbourne was perhaps unduly keen, and controversy too often savoured rather more of feud. Many examples from the medical and lay Press of the day could be cited where discussion descended from its proper medical or scientific plane to one in which a consideration of personalities was dominant. Mere criticism, as such, does not therefore constitute an indictment, and Beaney appears to have been less personal in his replies to it than were many of his opponents.

In the final analysis, it is doubtful whether Beaney exerted any significant effect on the surgery of the day, or any great influence on the development of Australian surgery in general. However, he was a most remarkable man, forceful, ambitious, generous, who, although apparently largely self-educated, acquired an enormous practice, a considerable popular reputation, an honorary appointment for many years at a teaching hospital, and a seat in the Legislative Council, all in the face of bitter opposition, much of it from his colleagues. He weathered several storms which would have wrecked the career of a lesser man, and lived to attain honour in his own time. As *Speculum* once remarked: "J.G.B. is tough, Sir, devilish tough."

Beaney's fame will grow rather than fade in the light of any objective appraisal of his attainments and personality, even as he thrived on criticism during his lifetime. Nor will he be offended at any such appraisal, for was it not stated on the title page of "The Generative System" (1877): "I hold it as an axiom, that it is the duty of every author to inform his species as much as possible, and thereby to give information, diffuse knowledge, dissipate ignorance, and familiarise truth and science."

Acknowledgements.

I am indebted to Dr. H. Boyd Graham for the opportunity to quote from Dr. G. T. Howard's valuable manuscript "Early Melbourne Medicine". My thanks are also due to Mrs. A. Donner, of the Medical Society Library, for her assistance in the preparation of the bibliography, and to Mr. R. Inglis, of the Royal Melbourne Hospital, who prepared the illustrations.

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Appendix I.

Bibliography of J. G. Beaney.

A. Independent Publications (summarized from Craig, 1950).

"Original Contributions to the Practice of Conservative Surgery", 1859.

"Contributions to Practical Surgery, Pathological, Therapeutic and Operative", 1861.

"Syphilis—Its Nature and Diffusion", 1869.

"Spermatorrhœa in its Physiological, Medical and Legal Aspects", 1870.

"Constitutional Syphilis, being a Practical Illustration of the Disease in its Secondary and Tertiary Phases", 1872.

"The Generative System and its Functions in Health and Disease", 1872.

"Children and their Treatment in Health and Disease, Part I, Infancy", 1873.
"Vaccination and its Dangers", 1875.
"Doctors Differ: A Lecture Delivered at the Melbourne Athenæum", 1876.
"Surgical Diagnosis—a Lecture Delivered to the Medical Students at the Melbourne Hospital at the Inauguration of the Second Session", 1877.
"Diseases of the Hip Joint", 1878.
"The History and Progress of Surgery. An Address Delivered to the Medical Students of the Melbourne Hospital on the Occasion of the Presentation of the Prizes in the Class of Operative Surgery".
"Clinical Lecture on Diseases of the Hip Joint delivered in the Theatre of the Melbourne Hospital", *circa* 1878.
"An Address Introductory to the Clinical Investigation of Disease delivered at the Melbourne Hospital", *circa* 1888.
"Clinical Lecture on Aneurysm of the Innominate Artery delivered at the Melbourne Hospital", no date.
"Stricture of the Urethra—Its Nature, Pathology, Symptoms, Causes, Consequences and Cure", no date.
"On Bony Ankylosis of the Joints and its Operative Treatment", no date.

B. Contributions to Journals. (As the files are incomplete in some instances further additions may yet be made.)

"Dislocation of the Elbow Joint, Treated as a Fracture, Reduced at the End of Three Months—Report of Case", *Melbourne Med. Rec.*, I, 1861, page 5.
"Contribution to Practical Surgery—On a New Method of Operating for Excision of the Knee Joint", *ibidem*, I, 1861, page 13, continued page 25.
"Contributions to Conservative Surgery—Gunshot Wounds of Joints and Removal of Bullets from Knee Joint", *ibidem*, I, 1861, page 49, continued page 61.
"Contributions to Conservative Surgery—On Contraction of the Knee Joint and its Treatment", *ibidem*, I, 1861, page 73, continued page 85.
"Contributions to Practical Surgery—On Vicious Union of Fracture and its Treatment", *ibidem*, I, 1861, page 97.
"Contributions to Practical Surgery—On Acute Inflammation of the Knee Joint and the Employment of Setons in its Treatment", *ibidem*, I, 1861, page 109, continued page 121.
"An Improved Fracture Apparatus", *ibidem*, I, 1861, page 133.
"Contributions to Practical Surgery—Causes of Disease of the Upper and Lower Jaws of Several Years' Duration—Disarticulation of the Jaw—Cure", *ibidem*, II, 1862, page 1.
"Contributions to Practical Surgery—Some Observations on Tracheotomy and on a Modification in the Trocar for Performing the Operation", *ibidem*, II, 1862, page 13. continued page 25.
"Contributions to Practical Surgery—Cases of Abscess and Fistulæ of the Perinæum", *ibidem*, II, 1862, page 37, continued page 74.
"Contributions to Conservative Surgery—On Excision of the Hip Joint", *ibidem*, II, 1862, page 85, continued pages 97, 109 and 121.
"Clinical Illustrations of Obstructive Dysmenorrhœa and on a New Uterine Dilator", *ibidem*, III, 1863, page 13, continued page 25.
"Clinical Illustrations of Intra-Uterine Polypi and on the Value of the Uterine Dilator in Discovering them", *ibidem*, III, 1863, page 37.
"Cases Collected to Assist in Forming a History of Non-malignant and Polypoid Tumours of the Œsophagus", *ibidem*, III, 1863, page 49.
"On a New Method of Treating Acute Inflammation of the Testicle, Suggested by its Pathological Condition", *ibidem*, III, 1863, page 61.
"On a New Metratome, with Engravings", *ibidem*, III, 1863, page 73.
"On the Employment of Iodine Injections in Chronic Effusion of the Knee Joint", *ibidem*, III, 1863, page 84.
"Cases of Pyæmia Occurring in Fracture with Some Observations on Non-Union in Fracture", *ibidem*, III, 1863, page 97, continued pages 109 and 121.
"Cases of Division of Stricture of the Urethra by External Incision", *ibidem*, III, 1863, page 133.
"Contraction of the Knee Joint and its Treatment", *Med. and Surg. Rev.* (Australasian), II, 1865, page 265.
"Extravasation of Urine Occurring in Old Cases of Stricture", *ibidem*, III, 1865, page 89.
"Puncturing the Testicle in Acute Orchitis", *ibidem*, III, 1865, page 126.
"On Stricture of the Urethra as Observed in Australia", *ibidem*, III, 1865, page 161.
"On Bony Ankylosis of the Hip Joint, with a Method of Excision Not Before Adopted", *ibidem* (Series 2), I, 1873-1874, page 4, continued page 22.
"The Necessity for Anæsthetics to Alleviate Human Suffering", *ibidem* (Series 2), I, 1873-1874, page 37, continued on pages 53, 69, 87, 104, 118, 135, 149, 165, 181.
"Stricture of the Urethra—Its Nature, Causes and Treatment", *ibidem* (Series 2), II, 1874-1875, page 4, continued pages 21 and 52.
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THE ANTI-GLOBULIN SENSITIZATION TEST AS APPLIED TO BRUCELLA INFECTION: A PRELIMINARY REPORT.

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THE diagnosis of Brucella infection depends to a great extent upon serological tests, but it has long been apparent that such tests do not reveal the frequency of infection which would be expected on epidemiological grounds. In Australia brucellosis is widespread amongst cattle, and bulked milk frequently contains viable *Brucella abortus* (Gregory, 1952). Since much unpasteurized milk is consumed, even in metropolitan areas, a significant incidence of brucellosis in the general population is to be expected. Likewise the incidence of both clinical and subclinical infection in appropriate occupational groups, such as slaughtermen, should be appreciable.

Considerable increase in sensitivity of the agglutination test has been reported by Wilson and Merrifield (1951), by application of the anti-globulin sensitization technique of Coombs *et alii* (1945) to the detection of brucella antibody. This modification has not yet been tried on an extensive scale. It seemed worth while to carry out a serological survey of Melbourne metropolitan abattoir workers who might be presumed to be heavily exposed to contact infection.

Sera taken from 337 men working in the three main abattoirs of the Melbourne city area were examined for brucella antibody both by direct agglutination and by the indirect anti-globulin method. Sera submitted for Wassermann test at the Royal Melbourne and the Alfred Hospitals were used as controls.

Material and Methods.

A formolized suspension of *Brucella abortus*, equivalent in agglutinability to the standard Oxford suspension, was used.

The Coombs Reagent (rabbit anti-human serum, absorbed) was prepared and supplied by the Commonwealth Serum Laboratories, Melbourne.

In a preliminary screening test all sera were tested at one in 40 and one in 160 final serum dilutions in a volume of 0·6 millilitre per tube. Racks were placed in the 37° C. water bath overnight and readings made at eighteen to twenty hours.

All tubes were then centrifuged at 3000 revolutions per minute for twenty minutes, the supernatant fluids were removed with a fine pipette, 1·0 millilitre of physiological saline was added, and each tube was well mixed. The tubes were spun again, supernates removed and the organisms resuspended in 0·4 millilitre of fresh saline. With a pipette delivering 32 drops per millilitre, one drop of a one in 15 dilution of Coombs reagent was then added to each tube. The racks were well shaken, returned to the 37° C. water bath and final readings taken after eighteen to twenty hours' incubation.

[1] Assisted by a grant from the National Health and Medical Research Council.

TABLE I.

Findings in 337 Abattoir Sera and 311 Control Sera.

Group.	Total Sera Tested.	Reciprocals of Titres.								Total Positive Sera.
		40	80	160	320	640	1280	2560	5120	
Abattoir sera—										
Direct agglutination ..	337	12	10	2	3	4	1	3	—	35 (10·4%)
Anti-globulin technique		43	25	37	27	15	11	1	2	161 (47·8%)
Control sera—										
Direct agglutination ..	311	—	—	—	—	—	—	—	—	—
Anti-globulin technique		10	—	3	1	—	—	—	—	14 (4·5%)

Sera showing agglutination were retitred in doubling dilutions, the end point being taken as an estimated 50% agglutination with incomplete clearing of the supernatant for both the direct and the indirect method.

This technique differs from that described by Wilson and Merrifield only in that the sensitized cells were washed once instead of three times. Preliminary tests had shown that:

1. Provided the supernatant was removed completely a single washing was sufficient, instead of three as recommended by these authors.

2. The concentration of anti-globulin serum did not seem to be critical, and a final dilution of approximately one in 200 was employed. No prozone effect was noted.

3. Enhancement of agglutinin titres with human globulin anti-serum prepared in the rabbit appeared to be specific. Resuspension of washed sensitized cells, either in saline or normal rabbit serum, did not increase agglutinin titres.

Results.

Reactions to the conventional agglutination test were observed in 10·4% of the 337 sera from abattoir workers, and reactions to the anti-globulin test in 47·8%. In the control group of 311 sera no reactions were observed in the direct agglutination test, but 4·5% of sera reacted to the modified Coombs test. The control group came from young, middle and old-aged adults. These findings, and the titres obtained, are given in Table I.

There were 35 sera in the abattoir group with antibody at titres of one in 40 or more detectable by direct agglutination. When the anti-globulin technique was applied to these sera the titres were unchanged in seven, double in nine, fourfold in ten, eightfold in six and sixteenfold in three sera. There was a tendency for sera giving high titres on direct agglutination to be less affected by the more sensitive technique—for example, of the eight sera with titres of one in 640 or greater, four showed no increase in titre with the anti-globulin method and four had a one tube (double) rise.

TABLE II.

Titres of 126 Abattoir Sera Reacting Only to the Anti-Globulin Technique.

Number of Sera.	Reciprocals of Titres.
42	40
23	80
29	160
21	320
6	640
5	1280

There were 126 sera from abattoir workers "positive" by the modified Coombs test, but "negative" on direct agglutination. The titres varied from one in 40 to one in 1280 and their distribution is shown in Table II.

After an interval of three months, further specimens of serum were obtained from 89 abattoir workers whose sera had shown titres of one in 40 or greater by the Coombs modification, although only 20 sera gave direct agglutinin titres. If a one tube difference, that is double or half the original titre, is considered to be within the limits of experimental error, then most specimens showed no significant change from the result of the previous test. Of the group of 89, 75 maintained the same titre in the second "bleed", five showed a rise in titre, and nine a fall.

Discussion.

Our findings confirm those of Wilson and Merrifield (1951), in demonstrating that the modified Coombs technique is considerably more sensitive than direct agglutination for detection of brucella antibody. The wide disparity between the positive finding in abattoir workers, who are exposed to an industrial hazard, and the control subjects, is evidence in favour of the specificity of the more sensitive technique. The finding that nearly 50% of abattoir workers show titres in one in 40 or more by the new technique, and that these titres persist at about the same level, is consistent with the assumption that these workers are heavily exposed to contact infection, and that they receive frequent "booster" antigenic stimuli.

The present results of standard agglutination tests in abattoir workers are in accord with those of other investigators (Topley and Wilson, 1947).

Inquiry was made for clinical evidence of prior or present symptoms which might be attributable to brucellosis, but as might have been anticipated, the information obtained was of little value. Histories of "influenza", night sweats, and similar febrile disorders were common. There is no ready means of ascertaining, in retrospect, whether any of these episodes were related to brucella infection, in view of the prevalence of similar febrile disturbances in the community at large and of leptospiral infections in abattoir workers.

It is proposed to extend these observations to ascertain whether or not there is close correlation between the presence or absence of antibody as determined by the modified Coombs test and the skin reaction to brucellergin.

Summary.

1. Sera from a group of 337 Melbourne abattoir workers, and from a control group of 311 persons, were examined for brucella antibody by direct agglutination and by an anti-globulin modification of this test, serum dilutions beginning at one in 40 being used.

2. Thirty-five (10·4%) of the abattoir sera reacted in the direct test and 126 (47·8%) gave a result with the indirect technique.

3. None of the control sera agglutinated in the standard method and only 14 (4·5%) reacted in the modified Coombs test.

Acknowledgements.

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HYPERPLASTIC CYSTIC DISEASE OF THE BREAST, WITH A REVIEW OF 199 CASE RECORDS.

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A DIFFICULTY in nomenclature must first be overcome in any account of those lesions of the breast which are neither inflammatory nor malignant. No disease in surgery has been given more names. This extravagance has increased the confusion. The name chronic mastitis is traditional and probably for this reason is most favoured by clinicians, but now that the disease is known with some certainty to be caused by a disturbance in the normal balance of ovarian secretions, the name hormonal mastopathy is more acceptable.

My preference is for the name hyperplastic cystic disease because it lays emphasis on the two pathological features which render the condition clinically significant. Most authors regard the various names as being synonymous; some, however, recognize various types of the disease and bestow a name accordingly. As most of these types are probably only various stages or degrees in the same process, such subdivisions are of doubtful value.

The main pathological features are well recognized and need only be summarized here: (*a*) epithelial hyperplasia (the epitheliosis of Dawson (1933)); (*b*) tendency to cyst formation; (*c*) fibrosis in the periductal tissues. The relative extent of each of these changes varies greatly from case to ease, and even in different parts of the same breast; this lack of uniformity is important because it adds to the confusion in diagnosis.

The symptoms of hyperplastic cystic disease are usually not very distressing, and the mortality rate is nil. Moreover, there is a tendency to spontaneous cure at the menopause.

In view of these three facts it is clear that hyperplastic cystic disease is of little importance on its own merits, but because of its habit of simulating carcinoma it enjoys a vicarious significance out of all proportion to its native innocence. The differential diagnosis from cancer is the crux of the problem. When the surgeon feels quite confident about the diagnosis, reassurance alone is very often all the treatment needed. This happy state of confidence may exist in perhaps half the total cases presenting. In the remainder a doubt is felt.

The physical signs can be confusing and even misleading; a large cyst surrounded by dense fibrous tissue can mimic carcinoma almost perfectly; surrounding inflammation may even fix the skin. More subtle is the suspicion aroused by a localized mass composed of epithelial hyperplasia and fibrosis.

In most other diseases there are a host of tests which can assist in making the diagnosis, but in breast lesions there are few such aids.

Transillumination has been known to reveal a lump so small as to be impalpable. This method has a special place in the appraisal of conditions in patients presenting with a bleeding nipple. Microscopic examination of a nipple discharge may reveal malignant cells and clinch the diagnosis (Jackson and Severance, 1946).

Aspiration is sometimes of value when a cyst is suspected. If fluid free from blood is withdrawn, the chances that a carcinoma is present are small. But carcinoma may exist in another part of the same breast. There is also the fear of plunging a needle into the heart of a malignant mass. This method is certainly not favoured at Sydney Hospital. (In a young patient with an obvious cyst it would, however, seem indicated.)

Soft tissue radiography has rarely yielded reliable information. In every doubtful case, therefore, the surgeon is obliged to operate mainly for the purpose of establishing the diagnosis. A new doubt now arises as to the scope of the operation. Excision and scrutiny of a localized lump will usually resolve these doubts, but arrangements for frozen section and an immediate report by a competent pathologist should be available, and may save the patient from a needless mutilation. Delay of some weeks whilst awaiting a pathologist's report should be avoided, although in country centres this situation may be forced upon the doctor. Even when the condition is clearly benign, the disease may be so extensive that the surgeon feels bound to remove more than he (or the patient) expected. What began as a biopsy may end as a mastectomy.

In the hope of gaining some useful information on this subject and of deriving benefit from the experiences, and indeed mistakes, of others, it was decided to review the records of such cases in patients admitted to Sydney Hospital in the last ten years for the purpose of surgical treatment.

The name hyperplastic cystic disease does not appear in the Standard Nomenclature of Disease which was adopted at Sydney Hospital for record purposes in July, 1942. The case reports used in this study were filed under four headings, namely: "Chronic Mastitis"; "Cystic Breast Due to Unknown Cause"; "Hormonal Mastopathy"; "Intraduct Papilloma". With the exception of cases of intraduct papilloma there was no very evident reason for selecting one of these names for a particular case. The choice appeared to depend on the trend of opinion at the time, or on the fancy of the resident medical officer. In the same period there were 62 patients with fibroadenoma admitted for operation. These have not been included because the clinical and pathological picture of this disease is relatively clear cut. It must be stressed that the cases reviewed belong to a very special group, namely, those in which the need for operation arose. In the same ten-year period many more patients suffering from this disease at a much earlier stage were seen in the out-patient department.

Incidence.

During the ten-year period ending June 30, 1952, 199 patients with hyperplastic cystic disease were admitted to surgical wards. Many of these were labelled "? Carcinoma". Only two patients were men (aged eighty-six and seventeen years respectively). The average age of the 197 women was forty-two and a half years. The oldest was seventy-six years. The youngest was only eighteen years and had noticed a lump since the age of fifteen years.

It is often stated that hyperplastic cystic disease is more prone to occur in breasts which have not fulfilled their physiological role of lactation. In this series of 197 women, 136 had borne children, and presumably the majority had suckled their offspring. The average age of the remaining 61 women without children was forty years. In numerous cases the opposite breast also appeared to be affected (usually to a lesser degree). The records were not sufficiently decisive to quote actual figures on this point.

(This lack of decision very often reflected the state of mind of the observer.)

Symptoms.

The presence of a lump was the most common symptom. Pain, tenderness and soreness were often mentioned as additional symptoms. Less common, but more striking, was a discharge from the nipple (with or without a lump). There were a few patients with unusual or vague symptoms, for example, general enlargement of a breast, retraction of the nipple, rash or itch of the nipple. Details are as follows.

Lump.

One hundred and sixty patients presented with a lump as the main symptom. In several instances this had been found by the doctor during a routine examination. The interval between the finding of the lump and admission to hospital was recorded in 138 cases. The average delay was thirty-seven weeks. (Such patients are given very high priority on the hospital admission waiting list.) Excluding four exceptional cases (with delays of sixteen years, twelve years, six years, six years) the average delay was twenty-two weeks. In many cases the lump was not clearly defined and was described as an "indurated area" or a "thickened sector". Eight patients were admitted with alleged lumps which the surgeon failed to find. Operation was performed in 152 instances. Details of the type of operation performed were as follows: local excision (or "biopsy"), 119; simple mastectomy, 19; radical mastectomy, 14; (mastectomies numbered 33). An attempt to correlate the findings of the pathologist with the clinical lump proved more difficult than had been imagined. In 60 cases cysts (one or more) of considerable size were found. The diameter of such cysts varied from 0·5 centimetre to 3·0 centimetres. In the majority of these cases the cyst was clearly the cause of the lump. In the remaining 92 cases the specimen presented less definite naked eye appearances. Frequently it was described as a whitish grey tough mass of breast tissue, studded with many minute cysts.

Microscopic examination of 152 specimens revealed that hyperplasia was "active" in 20 cases and excessive (simulating carcinoma) in five cases, and that fibrosis was marked in 11 cases. The pathological findings can be summarized thus: significant changes to account for the lump, in part or whole, were found in 96 cases; in the remaining 56 cases the changes were enough to warrant a diagnosis of hyperplastic cystic disease, but were without accent on any one feature.

A paradoxical feature of the disease is the fact that whilst both clinician and pathologist are concerned about the possible presence of carcinoma, it is often for different reasons. The thick-walled cyst often worries the surgeon, but in most cases the cells of its lining membrane are not very active. In a different part of the same specimen, however, there may be an area of epithelial hyperplasia which gives the pathologist anxious moments.

Nipple Discharge.

Twenty-nine patients presented with discharge from the nipple. Their average age was forty-six years. Eleven of these patients also had a palpable lump; three had a "doubtful" lump. In the remaining 15 cases the most careful palpation failed to reveal a lump. In no case was transillumination mentioned as having been attempted. In 11 cases the discharge could be described as "serous", and was brown, yellow or white in colour. The average duration of the discharge before reporting was sixteen weeks. The longest time was eighteen months. In 18 cases the discharge was bloody. The average age of patients in this group was fifty years, the average delay before reporting was fourteen weeks, the longest time was nine months.

The details of treatment are as follows: no operation, one case; duct excision, two cases; local excision, eight cases; simple mastectomy, 16 cases; radical mastectomy, two cases.

The fact that duct excision was performed only twice is noteworthy, since this is usually considered the treatment of choice. So eminent and experienced a surgeon as Sir Cecil Wakeley (1947) is most emphatic on this point, and in his article he deplores the modern tendency to neglect painstaking clinical examination and to remove the entire breast in young women. He advises the use of a probe in the dilated duct as an aid in localization. In our series of 18 cases in which bloody discharge was present, a lump could be found in only six, and in only a few of these could the lump be definitely accepted as the cause of the discharge. In one of the two cases in which duct excision was performed the duct was found to be filled with blood, but even microscopic examination failed to find the cause of it. It seems quite evident that in actual practice the culpable duct is often hard to find. (In a teaching hospital such a case would be examined by perhaps a score of doctors and students.)

The difficulty has been appreciated in at least one other centre, for in a very recent and exhaustive article on the subject Sandblom and Lofgren (1952) describe a most refined method of attempting to localize the lesion. This depends upon radiography after injection of the duct with 35% "Umbradil".

Simple mastectomy was performed 12 times in the 18 cases of blood discharge from the nipple. The records reveal at least three facts tending to support this procedure: (i) The multiplicity of papillomata (see later). (ii) Inability to find the actual lesion. (iii) Age of the patients (about fifty years). The last factor is probably the most important. Most surgeons would agree heartily with Wakeley that mastectomy in young women of twenty-five to thirty years of age for such a symptom is tragic. In this series there was only one woman under the age of thirty-five years.

The proper treatment for the patient with a bleeding nipple without palpable lump has always been a vexed question. Bloodgood (1922) prefers not to operate, whereas Donnelly (1950) summarizes: "Simple mastectomy is the treatment of choice . . ." The age of the patient and her future prospects as a mother are surely the crucial factors in this dilemma.

The pathological findings in these cases were interesting. In the 18 cases with bloody discharge extreme epithelial activity was found in only three, one or more papillomata in six cases, and no significant activity in nine cases. In one case in which the activity was so extreme as to resemble carcinoma, the patient was aged seventy-four years. In the 11 patients with "serous" discharge there were no very significant findings. In one (aged twenty-two years) epithelial activity was marked; in one fibrosis was marked; two patients had dilated ducts; one had cheesy material in the ducts. In the other six cases no special comment was made.

In general, epithelial activity appeared to be less marked in the cases in which "serous" discharge was present. But this information is of small comfort when we bear in mind the fact that similar discharge is known to occur, upon occasions, in cases of carcinoma. It would seem that a discharge, bloody or otherwise, may occur from a non-malignant breast in which epithelial activity is absent or so extreme as to resemble carcinoma. A bloody discharge from the nipple, as from any other natural orifice, will always inspire fear of cancer in both patient and doctor. The only assurance that can be given is that cancer is by no means the only cause.

Pain.

Pain of some description—for example, tenderness, soreness, or actual pain—was mentioned as an additional symptom in 46 cases. The pain was often more pronounced during, or just before, the menses. It often occurred in both breasts, and sometimes radiated down the arm. Operation for pain alone was performed in only one case.

This is not surprising as it is widely accepted that results in such cases are very poor.

Nipple Retraction.

Nipple retraction is so commonly associated with underlying carcinoma that surgeons view this sign with the utmost suspicion. The number of other accepted causes is a little surprising. Geschickter (1945) lists eight causes other than carcinoma. In this series of case records nipple retraction was the main symptom on three occasions. Details were as follows.

CASE I.—The patient's age was thirty-nine years. She had two children, the younger five years of age. She had had retraction of the nipple for ten months and intermittent whitish discharge for six months. No definite lump was found. She was treated by simple mastectomy. Pathological examination revealed that the nipple retraction appeared to be due to extensive fibrosis.

The cause of the fibrosis in this case is obscure. Garland (1951) states that near the menopause a milky discharge may occur. Infection may then cause induration and retraction, which simulates cancer.

CASE II.—The patient's age was sixty years. She had four children, the youngest twenty-eight years of age. She had complained of itch and rash of the nipple for one month and of serous discharge (time not given). Nipple retraction was present but no lump. Radical mastectomy was performed. Pathological examination revealed no naked eye signs of neoplasm; cheesy material was seen in the ducts. Microscopic examination revealed hyperplastic cystic disease and but little epithelial activity.

In this case the surgeon presumably suspected Paget's disease of the nipple. The true diagnosis is open to question. Some features suggest the condition of dilated ducts so carefully described by Bloodgood (1923) and named by him "varicocele tumour of the breast". In this article he states:

> As I have had two patients with discharge from the nipple which produced a slight eczema and for this reason were diagnosed Paget's disease, I take this opportunity to emphasize again that in Paget's disease there is no discharge from the nipple ducts; there may be weeping, even blood-tinged, after the ulceration has begun. But nothing can be expressed from the nipple.

CASE III.—The patient was fifty-two years of age. She had no children. She had local redness near the nipple and nipple retraction; no definite lump was found. She was treated by local excision. Pathological examination revealed hyperplastic cystic disease without exceptional features.

The history was not given in detail. It is possible that here the retraction was due to low grade infection resembling plasma cell mastitis (Cutler, 1933). It is worthy of note that in these three cases of nipple retraction no palpable tumour could be found.

These cases emphasize the fact that the nipple may be retracted in the absence of carcinoma and that the surgeon is justified in exercising discretion in his management of such cases, particularly in the absence of a lump. When in doubt, biopsy rather than radical operation seems prudent.

Treatment.

It has been convenient to make some reference to treatment in relation to individual symptoms. Certain other aspects of operative details are of interest. The figures for actual operations performed are as follows: local excision or biopsy, 137 cases; simple mastectomy, 36 cases; radical mastectomy, 16 cases (52 mastectomies); a total of 189.

It is obvious that the most favoured operation was the most conservative, local excision of duct, nipple or breast tissue.

Simple Mastectomy.

Simple mastectomy was employed more frequently than might be expected, namely, 36 times in 189 operations, equivalent to 19% or nearly one in five. The main symptom in these 36 cases was as follows: lump, 15 cases; discharge, 17 cases; enlargement of breast, two cases; pain *plus* lumpiness, two cases.

This operation in the treatment of hyperplastic cystic disease is sometimes condemned as being too sweeping, but when the breast is the seat of advanced and extensive disease and the age of the patient indicates that future lactation is unlikely, there is much to commend such a procedure. Moreover, some have even thought that hyperplastic cystic disease is a precursor of carcinoma. Finally, the scar which results from a fairly extensive local excision is sometimes most unsightly (probably because of a tendency to hæmatoma formation).

Radical Mastectomy.

Radical mastectomy for non-malignant disease represents an error in diagnosis. It can only be said that the surgeon has erred on the side of safety. This happened on 16 occasions in this series (8·4%). The average age of the patients was forty-eight years; the youngest was twenty-four years, the oldest sixty-seven years. In 13 cases a lump was the only symptom. In seven of these a cyst was the cause of the lump. Fibrosis around the cyst was sometimes marked. One patient, aged sixty-seven years, had a bloody discharge and a lump. These symptoms were caused by an intraduct papilloma 1·1 centimetres in diameter. One case (previously described) simulated Paget's disease. The remaining case was interesting. Details are as follows:

The patient, aged twenty-four years, had a child aged five months. She had had swelling of the breast for five months. Previous treatment (elsewhere) was by irradiation. Pathological examination revealed a very large cyst with dense fibrosis. The breast in this patient apparently enlarged rapidly and so simulated the dreaded carcinoma of lactation. The previous irradiation no doubt added to the confusion.

Such difficulties in diagnosis can be overcome only by biopsy in every case in which the slightest doubt exists. In the past, surgeons have been strangely shy of performing biopsy in the breast for fear of hastening the spread of cancer cells, but it is difficult to see that the breast is different from every other part of the body where biopsy is accepted without hesitation. With the usual technical precautions such fears are probably groundless and should not be allowed to deprive us of the great benefits of a correct diagnosis.

Sir Gordon Gordon-Taylor (1952) states emphatically that biopsy with frozen section and report by a competent pathologist should be routine performance in doubtful cases, and that at the Middlesex Hospital such methods have virtually eliminated errors in diagnosis.

Radical mastectomy is a major operation with a small but appreciable mortality rate and a morbidity rate which should not be lightly ignored, and finally the patient submitting to this procedure suffers a great indignity.

Summary.

The case records of 197 women admitted for treatment of breast lesions subsequently found to be hyperplastic cystic disease were studied. The main findings were:

1. The majority were near or past the menopause (the average age was 42·5 years).

2. Of the total number 69% had borne children.

3. The average delay in reporting a lump was about six months.

4. In about one-third of the cases in which lumps were excised the pathological changes were minimal.

5. A bloody discharge from the nipple brought the patient to the doctor much sooner than did a lump (three and a half months). Two-thirds of these patients were treated by simple mastectomy.

6. Nipple retraction was present in three cases, all without a palpable lump.

7. Simple mastectomy was performed in one-fifth of these patients.

8. Radical mastectomy was performed in 8·4% of cases (in the belief that carcinoma was the likely diagnosis).

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THE ROLE OF NERVOUS FACTORS IN THE CAUSATION OF PEPTIC ULCERATION.

By BRUCE ROBINSON.

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Yond Cassius has a lean and hungry look;
He thinks too much.

THE cause of peptic ulceration is not fully known, but these ulcers may be regarded as representing the resultant of the action of many forces rather than being due to any one of them. The most important of these appear to be the presence of hydrochloric acid and pepsin, nervous factors and trauma.

The ulcers are frequently stated to occur in individuals with a certain type of personality whose symptoms are aggravated by emotional stress. It is now possible to suggest a mechanism by which the nervous factors work. Cortical activity may affect the hypothalamus, from which impulses are conveyed by autonomic nerves to the stomach to produce symptoms or ulceration by an exaggeration of physiological effects; the morbid anatomical changes being the secondary result of distributed functions, themselves the result of chronic emotional conflict.

The Physiology of the Stomach.

Edkins in 1906 demonstrated that the secretion of hydrochloric acid was due to gastrin, a hormone formed in the pyloric mucosa when in contact with certain foods. It reaches the glands of the fundus by the blood-stream and stimulates the acid-producing parietal cells. Pavlov showed that the sight, smell or taste of enjoyable food produced a copious secretion of acid and pepsin. This effect is mediated through the vagus nerve. Gastrin is a humoral intermediary for this flow, and vagal stimulation causes its elaboration in the pyloric antrum. Intravenous injection of gastrin will evoke a juice poor in enzyme content, whereas vagal stimulation produces one of full content, suggesting that gastrin in only part of the hormone. Histamine may be another active principle.

Peptic ulcers are confined to mucosæ that are bathed in acid, but are rare in parts that themselves secrete acid except along the lesser curvature of the stomach where other factors as trauma and local vascular arrangements are probably effective.

Parasympathetic impulses stimulate gastric and duodenal movements, relax the pyloric sphincter, dilate the vessels in the stomach wall and increase the pepsin-hydrochloric acid secretion. Stimulation of the sympathetic nerves produces an opposite effect. In addition the sympathetic nerves possibly control a system of arterio-venous anastomoses in the submucosa of the stomach wall (Barclay and Bentley, 1949). The opening of these "shunts" by nervous impulses or traumata would deprive the mucosa of its blood supply and might thus cause acute ulceration. Sympathetic blocking agents and parasympathetico-mimetic drugs are thus contraindicated in peptic ulceration.

The Hypothalamus and Its Connexions.

The hypothalamus is intimately associated with vegetative and emotional life. It has connexions with many other parts of the brain, cortical and subcortical, and is the highest ganglion of the autonomic nervous system.

Its anterior and medial nuclei are believed to control the parasympathetic, and the posterior and lateral nuclei the sympathetic nerves. In monkeys, stimulation of the parasympathetic areas increases gastric pressure and peristalsis if the vagus is intact. Stimulation of the *tuber cinereum*, continued stimulation of the vagus or injection of pilocarpine—a parasympathetic stimulant—into the third ventricle produces areas of hyperæmia and erosions in the stomach. Lesions of the hypothalamus may be associated with hyperphagia and with hæmorrhages, ulceration and perforation of the stomach. Harvey Cushing (1932) described acute and chronic ulcers of the stomach, duodenum and œsophagus following operations or lesions in various parts of the brain. In one case there was a perforation of the stomach following on an operation involving the orbital part of the frontal lobe, while chronic ulceration was present in one patient with a cerebellar tumour and in another with a lesion in the region of the third ventricle. Arteta (1952) described similar changes in the stomach and duodenum in patients with lesions in various parts of the frontal lobe and recalled that Brown-Séquard in 1876 reported a perforated gastric ulcer in a dog whose frontal lobes he had cauterized. Stimulation of the orbital areas causes alteration in gastric mobility, sphincter tone and intragastric pressure, and damage in animals may cause intussusception, pylorospasm, hypermobility, gastric hæmorrhage, hyperphagia and obesity. Cushing believed that the ulcers he found were the result of parasympathetic stimulation and quoted the earlier observation of Rokitansky, who thought that peptic ulcers were caused by "a diseased innervation of the stomach, owing to a morbid condition of the vagus, and to extreme acidification of the gastric juice". Byrne (1951), discussing post-traumatic hypothalamic disorders with disturbances of autonomic function, regards these exaggerated reactions as being due to a release of inhibitory neopallial control from damage to cortico-hypothalamic tracts.

Impulses from the frontal cortex may reach the hypothalamus directly. Tracts have been traced to the supraoptic and paraventricular nuclei, to the mamillary bodies and to the lateral and posterior parts of the region. Those to the supraoptic nuclei are of significance, as these are connected to the posterior part of the pituitary gland. There are also important indirect connexions. The cingulum passes backwards from the frontal cortex along the top of the *corpus callosum* to the hippocampus, and from there the fornix—an important efferent bundle from the whole of its area—sweeps forwards and downwards to the mamillary body. The components of this indirect route are closely connected with emotional and visceral tone. Thus Babkin (1950) found that stimulation of the cingulate gyrus caused changes in gastric mobility, while stimulation of the hippocampus produces many effects that are mediated through the autonomic system. These results suggest that the archeopallium has functions far beyond those associated

with the sense of smell. It appears to be closely associated with the experience of emotions. Indeed, the operation of cingulectomy is now performed for the relief of symptoms in certain psychoses.

Besides these cortico-hypothalamic connexions it is less frequently realized that there are important afferent tracts from the hypothalamus to the frontal cortex. The chief of these relay in the thalamus. Those to the dorso-medial nucleus arise in various parts of the hypothalamus and those to the anterior nucleus arise in the mamillary body and reach it by the mamillo-thalamic tract of Vicq d'Azyr. Le Gros Clark (1948) states:

> By way of the anterior and dorsomedial nuclei of the thalamus, the greater part of the cortex of the frontal lobe must be regarded as a projection area receiving the products of activity of the hypothalamus, in the same way that the visual cortex is the projection area for retinal activities, or the auditory cortex for cochlear activities.

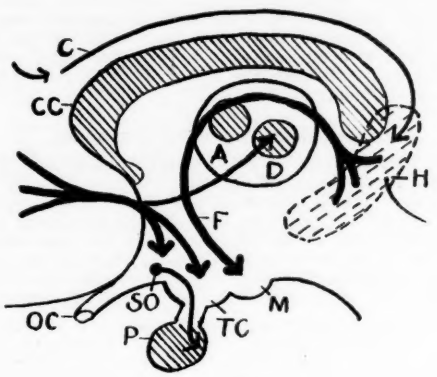

FIGURE I.

Diagram showing some afferent hypothalamic connexions. A = anterior nucleus of the thalamus. C = cingulate gyrus. CC = *corpus callosum*. D = dorso-medial nucleus of the thalamus. F = fornix. H = hippocampus. M = mamillary body. OC = optic chiasma. P = pituitary body. SO = supraoptic nucleus. TC = *tuber cinereum*.

When it is recalled that the mamillary bodies receive the efferent tracts from the whole of each hippocampus, it will be seen, too, that the hypothalamus may be regarded as a relay station between these and the frontal cortex. Thus it will be seen that impulses may pass to and from the neopallium and the hypothalamus either directly or by way of the hippocampus or the thalamus.

The psychic flow of the gastric juice depends on an intact cortex.

The effect of cortisone and ACTH in causing an increase in appetite and gastric secretion draws attention to the close connexion, nervous and vascular, between the hypothalamus and the hypophysis and suggests that the former may also influence the stomach by other than nervous routes.

Psychological Factors.

Having traced pathways from various parts of the cortex to the gastric mucosa and having suggested mechanisms through which they may affect it, it is now the place to consider the changes that may set these mechanisms into pathological action. Irritation of cortical and subcortical centres sufficient to cause gastric disturbances may have various origins. Physical and chemical factors have been described, but these can hardly be evoked to explain ordinary peptic ulceration. Another origin must be sought for.

Peptic ulcer patients are generally regarded as having a characteristic personality and physical habitus. Gainsborough and Slater (1946) subjected 162 of them to a psychiatric review and regarded them as being of energetic disposition with tendencies to anxiety, irritability, obsessionality and hyperchondriasis, while Draper (1942) stated that they are conscientious to the extreme, high-principled and ambitious. Physically they are usually typified as being lean and active, with deep naso-labial grooves.

Much light is thrown by the classical work of Wolf and Wolff (1943) who have observed their introspective subject Tom for over eight years. He had a complete occlusion of the œsophagus which followed a scald on "drinking extremely hot clam chowder" when nine years old. He now has a gastric fistula midway between the umbilicus and the xiphisternum through which protrudes a generous collar of mucous membrane. For fifty years he has fed himself by chewing his food and introducing the bolus into his gastrostomy. The effect of his very labile emotions on his gastric functions can be observed readily. Feelings of withdrawal such as fear, sadness, discouragement or

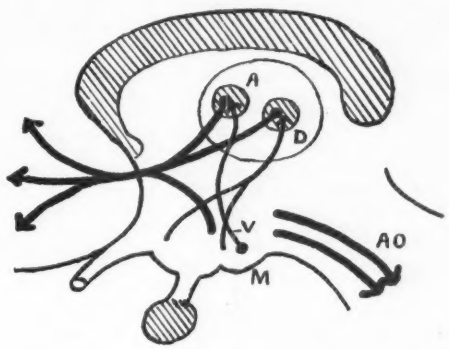

FIGURE II.

Diagram showing some hypothalamic efferent tracts. A = anterior nucleus of the thalamus. AO = autonomic outflow. D = dorso-medial nucleus of the thalamus. M = mamillary body. V = bundle of Vicq d'Azyr.

self-reproach are accompanied by mucosal pallor and inhibition of acid secretion and contractions, that is, by changes such as are evoked by sympathetic stimulation. Feelings of anxiety, frustration, resentment, hostility or aggression are associated with hyperæmia, hypersecretion and hypermobility and with heartburn and abdominal pain, that is, by those changes seen following parasympathetic activity. In this later state mucosal erosions are readily produced by trifling traumata and spontaneous bleeding points frequently appear. When anxiety is prolonged the hyperfunction persists during sleep. Put into colloquial terms, feelings that make his face red make his stomach red. They regard this increased activity of the stomach as due to hostile aggressive feelings when a patient is inhibited and believe there is a return to normal when the subject finds emotional security. Wolf (1950) has continued this study with other patients. He describes, for example, a woman who reacted to despairing anxiety with nausea and facial pallor. During such periods a kymograph connected to a gastric balloon showed complete cessation of gastric activity.

Draper (1942) and others have recorded pain, perforation and hæmorrhage following severe emotional disturbances. This history, if sought for, is commonly found.

As has been shown, functional gastric disturbances may be related to either sympathetic or parasympathetic activity. Either may be the result of emotional stress. Bearing in mind the role of the sympathetic nervous system in times of danger, it might be expected that in all cases of stress there would be a decreased gastric acidity. However, Cannon's views regarding the emergency functions of the sympathetic system were based on studies of acute responses, and recently Mahl (1952) has demonstrated that chronic fear in monkeys is associated with

increased gastric acidity and other signs of parasympathetic activity.

Dunbar (1948), quoting from F. Alexander's basic work at the Chicago Institute of Psycho-analysis on the emotional factors related to peptic ulceration, states that at first there was a feeling that ulcers developed more frequently in those of one personality type. However, early in the study it was concluded that what was characteristic was not so much the personality type as a typical conflict situation that might develop in different types of personality. This typical conflict was between the wish to remain in a dependent infantile situation on the one hand and that of pride and aspiration for independence, accomplishment and self-sufficiency on the other; that is, the problem arising from the desire to be appreciated, loved and taken care of and the rejection of this by the adult who cannot admit to these unconscious wishes and who, as a consequence, over-compensates with a demonstration of great energy and endeavour. Perhaps this is the explanation of the findings of Doig and Wood (1952), who found that many of their patients did not fit into the personality type regarded as typical for this disease.

Psychoanalysts describe the earliest period of an infant's extrauterine life as the oral stage, as during this time the main interest and source of gratification is in taking in food by the mouth. It is a completely parasitic period of dependency on the mother's love and care. Later on the interest passes during the "potting period" to excretion —the anal stage—and so on. In neurotic states or in times of stress when the subject is unable to adapt himself to his environment and handle his problems in an adult manner, he tends to fall back to one of the earlier stages of development. In the patient with a gastric neurosis or a peptic ulcer it is to the oral stage.

Many peptic ulcer patients are outwardly aggressive, ambitious and independent, refusing help and burdening themselves with all kinds of responsibilities. This is the behaviour considered characteristic of the successful business executive. In these the dependent feelings must be carefully hidden. The more they strive for independence and responsibility, the stronger is the unconscious desire to be cared for and to return to the oral stage. Food is then wanted not to satisfy hunger but as a symbol for love and help. The stomach behaves in response to this stimulus as if it were taking or about to take in food and reacts with hypermobility, hypersecretion and hyperæmia. This account explains the observations of Wolf and Wolff (1943) and also the relief derived from treatment in hospital, as there the patient is able to shed his responsibilities and acquire by way of a seemingly legitimate, socially acceptable compromise, the care, help, attention and security he craves. His symptoms have justified his surrender to an infantile state. Observe, too, how closely the attention to diet, frequent feeds of soft foods and milk must gratify the infantile oral desires. With some qualifications these remarks also apply to the symptomatic benefit derived from a holiday.

Food is not the only thing that may be taken into the mouth; tobacco or alcohol may also be used and their action in stimulating the flow of gastric juices may not be entirely a chemical one. In my experience these patients depend more on tobacco than on alcohol. This may be because indulgence in the latter would be incompatible with their overt behaviour attitudes. Obese persons are also oral types, but here the insecurity more obviously shows through their façade of happy self-indulgence.

In most papers on this subject no differentiation is made between gastric and duodenal ulcers. The Medical Research Council (1951), however, found in their series that anxiety over work was entirely confined to those with duodenal ulcers. Perhaps the explanation is that, though hyperchlorhydria is invariably present with duodenal ulceration, it is not always so with gastric ulcers. Indeed, these may persist even with achlorhydria. If it be true that the nervous factors cause the hyperchlorhydria, it may be that it is only those ulcers in which this plays a role that are examples of a psychosomatic disorder. In this context, however, it is of interest to observe that Doig and Wood (1952) were unable to differentiate between the personality types seen in their gastric and duodenal ulcer patients.

The Medical Research Council (1951) also noted that the main source of anxiety was that over work and not over home affairs. This indeed is the usual impression and is the common first answer given in reply to questioning. It has, however, always seemed to me a superficial one. Here again we are presented with a socially acceptable solution and my feeling is that investigation into such factors as the amount of support received at home would give a truer answer to the problem. Persons with this temperament are hardly likely to admit readily that their wife does not provide them with an adequate mother substitute. If she did perhaps they could then cope with their business worries. The wife who is not able to provide the emotional support may, however, very adequately busy herself supervising the minutiæ of the orthodox dietary regime. Indeed, as Weiss and English (1943) have pointed out, food may be given instead of emotional sustenance. The "good provider" type of wife or mother may take an excessive interest in feeding her family in an unconscious effort to compensate for a weak emotional relationship and thus reinforce the accepted views regarding the treatment of peptic ulceration.

Observations Regarding Treatment.

There seems no doubt that the accepted methods of treatment with rest, sedation, antacids, atropine and diet must be followed during active phases in the same way that local applications must be used in the treatment of the neurodermatoses. However, from what has been said this alone is obviously very inadequate. Indeed, the recent spate of critical articles on this subject indicates that the usual methods of treatment leave much to be desired.

It will also be clear that the usual advice to rest, avoid worry or take a holiday is facile and superficial. Changes ordered in life situations can only be regarded as symptomatic therapy. For practical reasons most patients must pursue their ordinary activities and they will be discontented if they cannot do so unless their attitude becomes changed or their symptoms sufficiently severe to permit cessation without loss of face.

The symptoms must be considered only as indicators of the underlying personality disturbance and continued attention to them will only fix them and contribute to their perpetuation.

No investigation is complete that merely enumerates physical and chemical data. Time must be spent in the elaboration of the social history and in discovering the patient's attitude towards his environment.

Conclusion.

Much empirical knowledge regarding the role of nervous factors in disease was ignored or became lost as a reaction to the ignorant and uncritical assumption of the importance of such factors as an explanation of many phenomena. More recently some of these opinions are being gradually reexamined and tested, and it is now known that nervous components occupy an important place in the constellation of forces required to produce an abnormal change in a tissue or in its functions.

These nervous factors may act at peripheral, subcortical or cortical levels and may be the result of organic changes or of psychogenic influences; the remote effects produced at their behest are necessarily mediated by way of physiological mechanisms.

These observations are well exemplified by changes observed in the alimentary canal and may be used as the basis for an enhanced understanding of the ætiology of peptic ulceration. In clinical peptic ulceration organic nervous lesions are rare, but psychological deviations are common and are related, in part at least, to the importance of the alimentary system to the emotional life of the individual.

Psychotherapy therefore is a most useful preventive measure during the period of functional symptoms pre-

ceding the development of the ulcer and is an essential component of treatment when it is established. Virtually all these patients will admit that their symptoms, which almost certainly indicate activity of the disease, are aggravated by emotional factors. The psychotherapy must be directed to the conscious and unconscious interpretation of these stimuli and it should be clear to the patient that the powder, the mixture and the diet, though necessary for the time being, are regarded as being of secondary importance compared with the subject under discussion.

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Reports of Cases.

PAPILLOMATOSIS OF THE LARYNX TREATED WITH AUREOMYCIN.

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PAPILLOMATOSIS of the larynx is an uncommon condition, usually occurring in young children. Multiple papillomata occur on the larynx and adjacent parts; they usually recur rapidly after removal and produce a progressive laryngeal obstruction. Although the growths are of a benign nature, the condition is very troublesome to treat and has a high mortality rate, although spontaneous recovery often occurs about puberty.

A virus infection has been postulated as the cause of the condition, and in fact the growth has been transplanted by means of a filterable agent to both the skin and mucous membrane surfaces. Hollinger, Johnston and Anison (1950) considered that aureomycin might have a specific therapeutic effect against such a virus infection, and they treated seven patients with very encouraging results.

Clinical Record.

G.C., a boy, aged two years and ten months, was first admitted to the Princess Margaret Hospital for Children on July 14, 1949. For about one year he had suffered attacks of shortness of breath lasting for several days. Three of the attacks were very severe, and he became blue and collapsed during them. As a baby he cried normally and said a few words, but for the past twelve months he had not spoken and had no voice.

On examination the child was seen to be a small, thin, pale boy lying very quietly in bed. His pulse rate was 120 per minute and his respirations numbered 24 per minute. His weight was 21 pounds 4 ounces. Inspiration was prolonged, and there was an indrawing of the suprasternal and supraclavicular tissues, with bilateral indrawing of the lower part of the chest wall. Air entry was poor to all regions of the chest, but there were no adventitiæ. The child was not greatly distressed, but it was obvious that he reduced all movements to a minimum, as was necessitated by his reduced air intake. X-ray examination of his chest revealed no abnormality.

When examined by direct laryngoscopy the epiglottis and arytenoid eminences appeared normal, but the remainder of the larynx was obscured by a red granulomatous mass. A tracheotomy was then performed. The tracheal mucosa was normal as far as could be seen through the tracheal opening. Two weeks later a direct laryngoscopy was performed under general anæsthesia and several masses of papillomata were removed with cupped forceps. The pathologist reported that the material removed was a benign squamous-celled papilloma. After two further removals of papillomata at weekly intervals the patient could breathe through the larynx and the tracheotomy tube was removed. He was discharged from hospital and remained well for three months; but he was readmitted to hospital on December 12 and an immediate tracheotomy was necessary. This was again followed by the removal of laryngeal papillomata on several occasions, and it was possible to remove the tracheal cannula after four weeks.

During the next nine months laryngeal papillomata were removed on six occasions; on each occasion the growths had reformed and covered the whole glottis. The trachea and œsophagus were examined on several occasions, but no extension beyond the larynx was ever found.

On November 5, 1950, after further removal of papillomata, the patient was given 200 milligrammes of aureomycin every six hours for ten days. After this, on November 27, no papillomata were seen on direct laryngoscopic examination. Two months after the course of aureomycin the larynx was still free from papillomata and the child has remained in good health for the past two years. The voice is now good and he has a good vocabulary. Prior to treatment with aureomycin, papillomata had been removed under general anæsthesia on 16 occasions.

Discussion.

Papillomatosis of the larynx is the commonest cause of chronic progressive laryngeal obstruction in young children. Symptoms are first noticed at the age of about two years. An alteration in the character of the voice is followed by progressive hoarseness and finally aphonia. Respiratory obstruction produces dyspnœa progressing to asphyxia. Personality changes are common as a result of enforced inactivity and inability to speak.

Extension of the condition down the trachea may occur and bronchial obstruction may result. Involvement of the tracheotomy opening may occur. The growths are friable and bleed easily with trauma, but not excessively. Microscopic examination shows the papilloma to be composed of a vascular core of connective tissue covered by stratified squamous epithelium. The epithelial cells may show frequent mitotic figures indicating rapid growth, but the cells are well differentiated and do not extend beyond the basement membrane.

Many forms of treatment have been advised, but until recently reliance has been placed upon forceps removal of papillomata and tracheotomy when necessary to prevent respiratory obstruction. Tracheotomy has also been considered to have a more specific effect by placing the larynx at rest, and with this in view a tracheotomy has been maintained in some cases for several months. There are many objections to the prolonged use of a tracheotomy cannula, and improper care with infection of the wound

has been considered to result in extension of papillomata to the trachea and tracheotomy opening.

Radiation treatment both by radium and by X-ray therapy has been extensively used, and many cures have been so effected. Jackson strongly condemns this, as necrosis of cartilage has occurred with resultant laryngeal stenosis. In the past, however, dosage has been too high, and Foster (1951) has recently reported beneficial results from very small doses of irradiation, averaging about 75*r*. Recently three cases have been reported in which there was a good response to treatment by terramycin (Bradburn, 1951).

Summary.

A case is reported of papillomatosis of the larynx in which recovery followed aureomycin therapy.

The condition is briefly discussed.

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A CASE OF TETANUS.

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Clinical Record.

WHEN J.R., aged six years, was brought to the casualty department of the Royal Alexandra Hospital for Children, he had been in his normal state of health until two days earlier, when he began to complain of pain in the abdomen and was noticed to be walking unsteadily and with difficulty. Twelve hours before his admission to hospital he had begun to complain of a stiff neck, and for approximately four hours before his admission he had had difficulty in opening his mouth. He had had a cold one week earlier. He had been treated for an infected toe at a suburban hospital six weeks previously. He had been immunized for diphtheria and whooping-cough. There was no significant past or family history. The only other relevant detail was the fact that the child was in the habit of collecting horse manure in his billy-cart for his mother's garden.

Physical examination revealed the patient to be a flushed, intelligent child complaining of pain in the neck. There was very pronounced neck and spine stiffness, and Kernig's sign was present; the abdominal muscles were board-like, but there was no tenderness or guarding. The only skin lesions were an infected stye on the right eye and healing abrasions on both knees. There was no evidence of recent infection of the feet or toes. When the throat was examined the child went into a severe tonic spasm, with the spine rigidly arched, fists clenched and elbows stiffly flexed; the corners of the mouth were drawn down, and the jaws so tightly clenched that the spatula could be withdrawn only with difficulty. There was no cyanosis. The temperature was normal. The cardiovascular and respiratory systems were free from abnormality.

On the child's admission to hospital lumbar puncture was performed with some difficulty on account of the rigidly arched back. The cerebro-spinal fluid was clear and the pathologist reported that it contained no cells; the protein content was 10 milligrammes *per centum* and the chloride content 690 milligrammes *per centum*; glucose was present. Relief from spasm was obtained by an intramuscular injection of six millilitres of paraldehyde.

Over the next two days the patient was in a continuous state of tetanic spasm, which was relieved only by the rectal administration of "Avertin" (two millilitres to 80 millilitres of distilled water). It was discovered that even large doses of paraldehyde (five millilitres) given intramuscularly and "Sodium Gardinal" (three grains) not only failed to relieve spasms, but appeared to aggravate them; it was thought that the local irritation from injections outweighed their narcotic effect. At this stage a Ryle's tube was passed and adequate narcosis was obtained by giving one or two drachms of paraldehyde by the Ryle's tube as required. A "repeat" dose was given when the child was awake and complaining of abdominal pain. All nursing procedures and injections were grouped and carried out under cover of "Avertin" (two millilitres given *per rectum*). "Avertin" was also used to replace use of the Ryle's tube when it was pulled out, and if relief from spasms was not quickly obtained with paraldehyde.

It was found impossible to maintain adequate narcosis by any regularly repeated sedation, paraldehyde by Ryle's tube or "Avertin" rectally being given as required on the decision of the resident medical officer.

Antitetanus serum, 100,000 international units, was given by intramuscular injection on the patient's admission to hospital, and 50,000 international units were given daily for six days. An urticarial rash occurred on the sixth day, but disappeared within two hours. "Elixir Benadryl", two drachms every six hours for four doses, was given at this stage.

The administration of penicillin, 250,000 units every six hours, was commenced on the patient's admission to hospital and continued for twenty days.

Severe spasms, controlled by two drachms of paraldehyde given by the Ryle's tube or two millilitres of "Avertin" given *per rectum*, continued for fourteen days; their severity did not begin to diminish until ten days after the child's admission to hospital. Twenty days after his admission all spasms had ceased and the child was happy, eating well and reading comic papers. The abdominal muscles were still hypertonic and a trace of *risus sardonicus* was still in evidence when he was laughing or crying.

A number of special investigations were carried out. Examination of the blood revealed that the erythrocytes numbered 4,590,000 per cubic millimetre, the hæmoglobin value was 12·9 grammes *per centum*, the colour index was 0·94 and the corpuscular index was 91. The leucocytes numbered 6100 per cubic millimetre, 60% (3660) being neutrophile cells, 28% (1708) lymphocytes, 9% (549) monocytes, 2% (122) eosinophile cells, 1% (61) basophile cells; thrombocytes were numerous. Culture of a swab from the hordoleum produced a profuse growth of *Staphylococcus aureus* and diphtheroids; from the abrasions on the knees, after removal of the scabs, a light growth of *Staphylococcus aureus* was obtained. No tetanus organisms were discovered.

Discussion.

The reason for reporting this case is to describe the excellent control of tetanic spasms that was obtained with paraldehyde, 0·5 drachm per stone of body weight, given by Ryle's tube, and supplemented with "Avertin" given *per rectum* when necessary.

This method of giving paraldehyde produced adequate narcosis, without disturbing the patient at all, and proved much superior to massive doses of paraldehyde and barbiturates given parenterally.

No doubt this very simple measure has been used before, but no hint of it is to be found in any of the standard text-books or case reports consulted.

Acknowledgements.

Thanks are due to Dr. Donald Vickery, honorary physician, Royal Alexandra Hospital for Children, for permission and persuasion to present this case, and to the excellent team-work of the nursing and resident medical staffs, which made a happy result in the case possible.

Reviews.

Diseases of the Heart and Arteries: Anatomical and Functional Disturbances of the Circulation: Treatment. By George R. Herrmann, M.S., M.D., Ph.D., F.A.C.P.; Fourth Edition; 1952. St. Louis: The C. V. Mosby Company. Melbourne: W. Ramsay (Surgical) Proprietary, Limited. 10″ × 7″, pp. 652, with 215 text illustrations and four plates in colour. Price: £6 11s. 3d.

THE fourth edition of Herrmann's "Diseases of the Heart and Arteries" has been modernized by the inclusion of much of the recent work. This has been selected by the author only after due consideration and trial in his wards. The reader therefore benefits by his balanced judgement based on experience.

Although he deals concisely with such special investigations as kymography, he rightly places most emphasis on the ordinary bedside methods.

The chapter on electrocardiography is based on the work of Wilson and Sodi-Pallares.

As this book is intended to be a guide to the study of the subject, the author has dealt with it systematically. Although some anachronisms have been perpetuated he has attained his goal. This presentation of modern cardiological concepts is interspersed with items from his experience which frequently clarify individual problems.

The current interest in congenital lesions justifies the amount of space allotted to this section. The psychological aspect also receives adequate treatment.

The author enhances the value of the book by expressing his opinion on various subjects. Such opinions naturally will not meet with universal approval. For example, theophyllin-ethylene-diamine has not proved so valuable as the author suggests. Many cardiologists would deny that digitalis in myocardial infarction is harmless. Eight weeks' strict bed rest in these cases also would meet with much opposition.

Nevertheless this is a very useful handbook, the value of which is greatly enhanced by abundant illustrations by means of diagrams, sketches, photographs *et cetera*. It can be read with interest and profit by anyone studying the subject.

The History and Development of Neurological Surgery. By Ernest Sachs, A.B., M.D.; 1952. New York: Paul B. Hoeber, Incorporated. 8½″ × 6″, pp. 158, with 50 illustrations. Price: $5.00.

IT seems that the comparatively new specialty of neurosurgery has now reached a sufficiently mature stage of its rapid development for some of the leading exponents to look back upon the pioneering work of their predecessors, and to take stock of the voluminous literature that has steadily accumulated over the years. Within recent months at least three books have been published in the English language reviewing the history of neurological surgery; and, no doubt, the initial researches so enthusiastically undertaken will be of interest and value to all surgeons engaged in perfecting this highly technical craft.

The latest book dealing with the subject is one written by Dr. Ernest Sachs, formerly Professor of Clinical Neurological Surgery at Washington School of Medicine, St. Louis, in the United States of America. Within the space of 125 pages a compressed account is given of surgical procedure and practice involving the nervous system from the crude trephining operations of prehistoric times down to the specialized techniques of the present day; and nearly one-third of this small book is taken up with an impressive bibliography of 540 titles bearing on the subject.

The early chapters discuss the hypothetical methods employed by neolithic surgeons in trephination of the skulls of hapless victims for therapeutic, magical or religious purposes, followed by disquisitions on ancient neuropathology through Egyptian, Greek, Roman and Renaissance times to the end of the eighteenth century. The later chapters are concerned with the beginnings of modern neurological surgery, which made the first real progress with the help of anatomy, physiology and the strict application of aseptic principles in operative techniques. Lastly, the noteworthy achievements of the modern neurological era are discussed under separate headings with reference to pathological conditions, regional anatomy and diagnostic procedures; and much credit is given to the work of Sir Victor Horsley in establishing many important principles upon which the new specialty was largely based.

It is surprising to find that no detailed mention is made of the ancient Egyptian surgeon's advice on the diagnosis and treatment of severe cranial injuries; that several typographical errors should survive in such a short text; and that Clovis Vincent in 1936 used penicillin in the treatment of brain abscess. Furthermore, it is distressing to find that the faithful disciple of Galen, Jacques Sylvius, is placed in the fifteenth century and is still being associated with the fissure and aqueduct eponymously.

The book contains a number of illustrations, of which one portrait purporting to be that of Lord Lister bears a striking resemblance to an aging Claude Bernard.

The Esophagus and its Diseases. By Eddy D. Palmer, M.D., F.A.C.P.; 1952. New York: Paul B. Hoeber, Incorporated. 9¾″ × 6¼″, pp. 566, with 95 illustrations. Price: $15.00.

DURING the past decade notable advances in knowledge of the disorders and diseases of the œsophagus have resulted in great improvements in treatment, particularly in the surgical field. It was inevitable therefore that the vast literature on the subject would be condensed into a concise account in the form of a text-book. In his book Eddy D. Palmer has written a full and detailed account of the anatomy, physiology, disorders and diseases of the œsophagus. The value of the work lies mainly in such information being so readily available.

The book is attractively produced and the print easy to read. The illustrations are clear and generous in number and each section has copious references both within and outside the United States. It is unfortunate that the English is somewhat stilted and ponderous in places.

The first two chapters deal with the anatomy and physiology of the œsophagus. Then follow descriptions of congenital defects such as the atresias and fistulæ, and diverticulosis and diaphragmatic hernia. The physiological disturbances including cardiospasm come next, and then foreign bodies, ruptures and perforations are dealt with clearly and concisely. An account is then given of the infections involving the œsophagus and ulceration and its complications. Tumours, simple and malignant, are treated well. Of particular interest is a description of portal hypertension including a critical up-to-date appraisal of the numerous procedures now available for its relief. The relationship of the collagen diseases to the œsophagus provides one of the best chapters and the description of sclerodermatous œsophageal lesions is wholly admirable.

The author places great emphasis on diagnostic methods and is obviously expert in this field.

Physicians with a gastroenterological preference will require this book on their shelves, and it will prove a useful reference book for all physicians and surgeons who have an interest in the œsophagus.

Manual of Gynecology. By E. Stewart Taylor, M.D.; 1952. Philadelphia: Lea and Febiger. Sydney: Angus and Robertson, Limited. 9¾″ × 6¼″, pp. 204, with 70 illustrations. Price: 48s. 6d.

THIS is a short concise text-book to introduce the student and early general practitioner to this subject. Perhaps it is written in a manner rather too sketchy for these days when a final year examinee would be expected to go into greater detail than is contained in many chapters. But it is well set out and easy to read—and the author has a nice sense of humour—as when he discusses *pruritus vulvæ* and states that *pediculosis pubis* will surprise the best of families.

The first few chapters of this book deal with female anatomy and physiology, and developmental abnormalities, in a fashion neither better nor worse than that of many standard text-books—but certainly more briefly.

No quarrel can be picked with the diagnosis and treatment outlined in this book as it is on sound conservative lines, but operative technique is not included.

The discussion of endometriosis is good, and one cannot help but agree that its higher incidence in the upper economic groups is due to the private patient's demands for the relief of symptoms, when the diagnosis is so often made at operation.

Special mention is made of androgen therapy.

One must join issue with the sweeping statement that surgical correction of retroversion of the uterus should never be undertaken. This is just as misleading to the student as the wholesale advocacy of the operation. There are certain cases of sterility, menorrhagia and especially, per-

haps, dyspareunia in which the patient will be cured in no other way. Menstrual excesses are well, if simply, dealt with and a rational outline of treatment is indicated. Surely it is a masterpiece of understatement to describe stilbœstrol therapy and add "the above program of therapy is not always successful"!

There are so many good text-books of gynæcology that one rather wonders whether there is a demand for a volume which skims so lightly over the surface of the subject.

Rose and Carless' Manual of Surgery: For Students and Practitioners. By Cecil Wakeley, B.T., K.B.E., C.B., LL.D., M.Ch., D.Sc., F.R.C.S., F.R.S.E., F.R.S.A., F.A.C.S., F.R.A.C.S., assisted by 18 contributors; Eighteenth Edition; 1952. In two volumes. London: Baillière, Tindall and Cox. 10" × 6¾", pp. 1480, with 1011 illustrations, 18 in colour. Price: 63s. the set.

THE advent of the eighteenth edition of "Rose and Carless' Manual of Surgery", written by Sir Cecil Wakeley, President of the Royal College of Surgeons of England, prompts certain speculations. Does a book, after many revisions, eventually show signs of being too old, and as it were develop senile decay? Can pruning, however thorough, remove the dead wood of outmoded theory and practice so as to maintain a freshness and vitality equal to a new book? May an author become too distinguished in other fields for the good of his book?

Since 1898 Rose and Carless has been a standard surgical text-book in the English-speaking world, and has been translated into Chinese and Arabic.

Its last revision was in 1943, so much new knowledge, stemming from war surgery, the development of antibiotics and advances in many departments of surgery had to be incorporated into this edition.

This was accomplished by the exclusion of bacteriology and pathology, by calling on eighteen contributors for special articles, "while the new edition has been almost completely rewritten from beginning to end, while substantial alterations have been made in the context and substance of the book". This certainly betokens continued vitality, and the new articles are almost uniformly excellent, those on water and salt deficiency in surgery, and on burns being especially praiseworthy.

In many other chapters, however, there is considerable lack of balance, and much dead wood dating from early editions. While protruded intervertebral disk is discussed in twenty lines, spinal caries is given fourteen pages. An otherwise good chapter on affections of the brain still contains paragraphs on methods of opening the cranium which must date back almost to the first edition, while the continued advocacy of subtemporal decompression in head injuries prevents a procedure which was partly responsible for the high mortality of thirty-five years ago from sinking into well deserved oblivion.

There are numerous paragraphs throughout the book commencing with "In recent times", or "Of late, however", which purport to advocate "new" methods of treatment, such as Lotheisen's operation for femoral hernia (described in 1901, and wrongly stated here) and Wagner's method of osteoplastic craniotomy (about 1900), which must have been transferred unchanged through many editions.

The section on the gall-bladder and biliary passages seems likely to confuse rather than enlighten the student. Disorders of the biliary system nearly all stem from the presence of primary gall-stones, and this should be especially stressed, rather than the inflammations *et cetera* which are secondary phenomena. The statement, moreover, that "in biliary colic, jaundice generally follows an attack, being due to the swelling of the mucous lining of the biliary passages, which prevents the escape of bile", is, as applied to stones in the gall-bladder, a dangerously untrue statement, which must lead to increased morbidity by failing to point to the necessity of exploring the common duct wherever there is a history of jaundice having followed gall-stone colic (in the absence of acute cholecystitis).

Concerning duct papilloma of the breast, though Wakeley has insisted for many years that the papilloma only should be removed, it is curious that here it is stated that the condition should be treated by amputation of the breast in whole or in part.

An excellent chapter on anæsthesia terminates the book.

Though in some respects Rose and Carless is showing its age, in other ways the virtues of its popularity are obvious. An immense amount of material is presented, beautifully printed in two handsome volumes, and illustrated with more than a thousand blocks, for a price incomparably lower than must have been charged for a new book. Though some criticisms have been offered, Rose and Carless is long likely to remain one of the best and most popular of the surgical manuals.

Books Received.

[The mention of a book in this column does not imply that no review will appear in a subsequent issue.]

"Aids to Medical Diagnosis", by G. E. Frederick Sutton, M.C., M.D., F.R.C.P.; Seventh Edition; 1953. London: Baillière, Tindall and Cox. 6¾" × 4¼", pp. 352, with 45 text figures. Price: 7s. 6d.

One of the Students' Aid Series.

"One Little Boy", by Dorothy W. Baruch, with the medical collaboration of Hyman Miller, M.D.; 1953. London: Victor Gollancz, Limited. 8" × 5½", pp. 252. Price: 13s. 6d.

The psychological history of a boy, aged seventeen years.

"Principles of Intensive Psychotherapy", by Frieda Fromm-Reichmann, M.D.; 1953. London: George Allen and Unwin, Limited. 9" × 6", pp. 264. Price: 18s.

An elaboration of a course of lectures delivered to psychiatric audiences at Washington.

"Office Management of Ocular Diseases", by William F. Hughes, Jnr., M.D.; 1953. Chicago: The Year Book Publishers, Incorporated. 9" × 6", pp. 452, with 120 illustrations. Price: $9.00.

An attempt has been made to combine basic science with a discussion of the reasons for diagnosis and treatment.

"Medicine: Essentials for Practitioners and Students", by G. E. Beaumont, M.A., D.M. (Oxon.), F.R.C.P., D.P.H. (London); Sixth Edition; 1953. London: J. and A. Churchill, Limited. 9" × 6¾", pp. 852, with 66 illustrations. Price: 37s. 6d.

The fifth edition was published in 1948.

"Living with Cancer", by Edna Kaehele; 1953. London: Victor Gollancz, Limited. 7½" × 5", pp. 160. Price: 8s. 6d.

Written by a non-medical woman who suffered from cancer.

"Ophthalmic Pathology: An Atlas and Textbook", by Jonas S. Friedenwald, Helenor Campbell Wilder, A. Edward Maumenee, T. E. Sanders, John E. L. Keyes, Michael J. Hogan, and W. C. and Ella U. Owens, with the editorial assistance of Helen Knight Steward; 1952. Published under the joint sponsorship of The American Academy of Ophthalmology and Otolaryngology and The Armed Forces Institute of Pathology. Philadelphia and London: W. B. Saunders Company. Melbourne: W. Ramsay (Surgical), Limited. 11½" × 8", pp. 498, with 240 illustrations. Price: £8 11s.

Based on material in the Registry of Ophthalmic Pathology produced and sponsored by the two organizations acting as publishers.

"Electrocardiography in Practice", by Ashton Graybiel, M.D., Paul D. White, M.D., Louise Wheeler, A.M., and Conger Williams, M.D.; Third Edition; 1952. Philadelphia and London: W. B. Saunders Company. Melbourne: W. Ramsay (Surgical), Limited. 11" × 8½", pp. 386, with 294 text figures. Price: £4 15s.

An atlas "containing many electrocardiograms primarily for the practitioner of medicine".

"Standard Values in Blood: Being the First Fascicle of a Handbook of Biological Data", edited by Errett C. Albritton, A.B., M.D.; 1952. Prepared under the direction of the Committee on the Handbook of Biological Data, American Institute of Biological Sciences, The National Research Council. Philadelphia and London: W. B. Saunders Company. Melbourne: W. Ramsay (Surgical), Limited. 11" × 9", pp. 210. Price: £2 2s. 9d.

This work was first issued as Air Force Technical Report, Number 6039, and is planned to contain authoritative tabular data needed by scientists in the various fields of biology.

The Medical Journal of Australia

SATURDAY, MAY 2, 1953.

All articles submitted for publication in this journal should be typed with double or treble spacing. Carbon copies should not be sent. Authors are requested to avoid the use of abbreviations and not to underline either words or phrases.

References to articles and books should be carefully checked. In a reference the following information should be given without abbreviation: surname of author, initials of author, year, full title of article, name of journal without abbreviation, volume, number of first page of the article. If a reference is made to an abstract of a paper, the name of the original journal, together with that of the journal in which the abstract has appeared, should be given with full date in each instance

Authors who are not accustomed to preparing drawings or photographic prints for reproduction are invited to seek the advice of the Editor.

WHAT DO I GET OUT OF IT?

He that is greedy of gain troubleth his own house.
—PROVERBS XV : 27.

No one will deny that the labourer is worthy of his hire, whether he be a navvy at the roadside, a judge on the bench, a clerk at his desk, a parson in the pulpit, a seaman on a ship or a doctor in his consulting room. Work is the inevitable and proper duty of man; it brings him the means of livelihood so that he can "provide things honest in the sight of all men". It does more than this; it gives him dignity, and, whether he knows it or not, is the basis of any true happiness that he may enjoy. Each man must lay the foundations of his own character, and what he does reacts chiefly on himself. Walt Whitman puts it thus:

The song is to the singer, and comes back most to him,
The teaching is to the teacher, and comes back most to him,
The murder is to the murderer, and comes back most to him,
The theft is to the thief, and comes back most to him,
The love is to the lover, and comes back most to him,
The gift is to the giver, and comes back most to him—it cannot fail,
The oration is to the orator, the acting to the actor and actress, not to the audience. . . .

Work may be described, in terms of physiology, as being characterized by the expenditure of energy. We commonly hear of muscular work on the one hand and of brain work on the other. But few people work exclusively with hand or brain, though it is true, of course, that muscular energy predominates in one occupation and mental energy in another. It would be odd to think that a judge on the Supreme Court bench would have to pronounce his judgements with the same expenditure of muscular force as is shown by the navvy—clad perhaps in shorts, wearing heavy boots, and perhaps without a shirt, displaying to a silent and expectant court a magnificent muscular torso, sun-tanned and sweating. And the doctor in his consulting room must be careful that in his leisure he does not acquire corny hands which would revolt the abdominal wall of even the toughest "wharfie". Most men, in the strict sense of the term, are workers—there are few real drones in the community. If we wish to find drones, we must look for them at the extreme and opposite ends of the social scale. And when we think that such persons may exist, we are tempted to consent to Saint Paul's statement that "if any would not work, neither should he eat". There is another fact which we should all remember, and that is that we are all servants one of another, from the most exalted to the most humble. Some are servants of one, and some of many; but, whether we like the term or not, we are still servants. We sell the product of muscular or nervous energy, maybe to the whole community, maybe to a group of persons, or maybe to those who seek us out to acquire what we have to offer.

Medical men and women engaged in practice receive payment for their services, and they have a right to expect that the remuneration which they receive shall be commensurate with the service that they give. Some are in departmental or hospital services and receive salaries which vary with the type of work that they do and the type of organization which employs them. An effort is made by the Federal Council and the Branches of the British Medical Association in Australia and by other organized bodies to see that adequate medical salaries are paid. Sometimes these efforts are successful; at other times the results leave a good deal to be desired. In private practice, fees are almost always determined by the practitioner himself, or by a group of practitioners living and working in a more or less defined area. Though in some areas there may be grounds for dissatisfaction, it is probably true to say that by and large the fees received by private practitioners are reasonable. That some of the leading members of the British Medical Association in Australia look with disfavour on any attempt to increase fees at the present time is not really germane to the present discussion. What is intended is to draw attention to the tendency in the medical profession, as in other branches of the community, to look for immediate advantage as the outcome of any proposal to further some new objective or to extend the activities of the profession in a State or the whole of Australia or to lend its aid to projects in other parts of the world. The attitude, not necessarily spoken, is: "What do I get out of it?" Sometimes the question is not quite so personal, but refers to a group, a Branch of the British Medical Association, or the whole Association itself. Dr. Angus Murray in his President's address published in this issue refers to this very question. This attitude is born either of narrow vision or of greed; it would be kind to put it down to mere stupidity, but such an excuse can seldom if ever be offered. Inherent in the idea of a profession is a willingness to do something over and above what is required, something for the good of society, something for nothing. It is a commonplace to say that a profession may degenerate into a trade. The use of this statement is not really justified because many doctors act as if they were tradesmen and many tradesmen as if they had a professional outlook. It implies that tradesmen are of a lower order and imbued with ignoble motives—they are not all greedy and many of them will look beyond the immediate present to do something that may benefit their calling. If we use the commonplace saying, we must remember these facts and not preen ourselves as being

necessarily highminded. We are all stewards; in other words, we are responsible for something which will react on or benefit others—and "it is required in stewards that a man be found faithful". Greed is a pitiable failing, and when it raises its ugly head it spreads—the Scots tell us that "greedy folk hae lang airms". Medical men and women are specially endowed by their training; they have more advantages than most people; they have opportunities to lead gracious and useful lives. Admittedly they see much suffering and misery, but they can see the good in humanity and can bring to many comfort and happiness—they can, if they will, see into the very souls of men. Bearing all this in mind we can say with Walt Whitman, that incomparable humanist:

What behaves well in the past or behaves well today is not such a wonder,
The wonder is always and always how there can be a mean man or an infidel.

We might remember this when we are inclined to ask: "What do I get out of it?"

Current Comment.

DEXTRAN, OXYPOLYGELATIN AND RENAL FUNCTION.

AMONG many substances brought forward as plasma substitutes, two described as plasma volume expanders have shown particular promise. These are dextran and oxypolygelatin. Dextran, a polysaccharide composed essentially of a great number of molecules of glucose linked into long chains, was developed some years ago in Sweden and was referred to in these columns on August 27, 1949. It was discussed in some detail in an original article by Peter S. Hetzel, of Adelaide, which was published in the issue of May 17, 1952. Oxypolygelatin, a modified gelatin which remains fluid at low temperatures, was introduced in 1951. In the study of these substances and their use, aspects relating to the kidney do not appear to have received as much attention as they warrant. An important contribution in this respect has been made by Lawrence G. Raisz,[1] who has been working at the Brooke Army Hospital, Fort Sam Houston, Texas, on the renal excretion of these two substances and their effects on renal function. Raisz states that both these substances are rapidly excreted by the dog. When infusions are given to dogs with normal blood volume, 50% to 60% of oxypolygelatin and 40% to 50% of dextran can be recovered in the urine in four hours. Part of the remainder is retained in the blood, but about 20% cannot be accounted for and has presumably entered interstitial fluids. The presence of dextran has, in fact, been demonstrated in lymph, according to recent unpublished work by A. L. Gropper quoted by Raisz. When dextran and oxypolygelatin are given after hæmorrhage, it is found that excretion is slower and more variable, particularly with dextran. In Raisz's studies, the renal clearance of both dextran and oxypolygelatin was found to be not constant, but to decrease with time; that is to say, the rate of excretion was not directly proportional to the plasma concentration. During the first half-hour after infusion, the dextran clearance was 10% to 15% of the glomerular filtration rate, while the oxypolygelatin clearance was 20% to 30%. Both decreased to about 2% of the filtration rate in three hours. Another interesting finding was that although the retention of the material itself was quite uniform from dog to dog, the fluid retention, and so the plasma volume changes, were highly variable among the different groups of dogs studied, and appeared to depend on the state of hydration of the animal. The renal response to infusions of dextran and oxypolygelatin was not consistently different from the response to the same volume of isotonic saline solution, except that there was a greater increase in renal plasma flow with the colloid solutions. Multiple infusions of the substances appeared to have minimal deleterious effects.

Raisz quotes the work of a number of other investigators, a good deal of it unpublished, to indicate that the rapid urinary excretion of these substances observed in dogs has also been observed in man. A somewhat more rapid excretion is expected in dogs, since their glomerular filtration rate is higher in proportion to body size. The fall in renal clearance with time is also to be expected, as both expanders contain molecules with a wide range of molecular weights; the smaller molecules are cleared rapidly, and the retained material has a higher average molecular weight and therefore a decreased renal clearance. Raisz points out that in shock two variables may cause considerable variations in excretion and retention of expanders. Diminished renal function would, of course, affect urinary excretion. Changes in capillary permeability could also affect the movement of these materials into interstitial fluid. In two dogs given dextran after hæmorrhage, dextran excretion remained depressed after glomerular filtration had increased, a finding which indicates either diminished glomerular permeability to this material or tubular reabsorption of large amounts of material. Raisz states that although no specific attempt has been made to demonstrate the inverse relationship between molecular size and excretion in this study, the more rapid excretion of oxypolygelatin than dextran, and more particularly the very rapid excretion of an oxypolygelatin preparation of lower molecular weight, bear out the probability of this relationship. It has been suggested that dextran may be nephrotoxic, but from the results of his own studies, Raisz considers that any serious defect of this kind seems unlikely. However, the question in relation to man is still being investigated. Some important implications of the size of the molecules of these substances are pointed out by Raisz. The difference noted in the retention of multiple infusions of dextran and oxypolygelatin probably is due to the great number of large molecules (which cannot be excreted by the kidney) in the former preparation. The small molecules of both substances are not effective as plasma volume expanders, and indeed may be undesirable; they may cause a transient initial shift of fluid into the plasma during infusion, and they may be excreted in high concentration. Raisz suggests that it would be desirable to narrow the molecular weight range of both materials by removing the smaller molecules. This is, no doubt, a matter for the manufacturer. Raisz makes no comment on its practicability.

[1] *J. Lab. & Clin. Med.*, December, 1952.

THE EFFECT OF INTERRUPTED COURSES OF CHLORAMPHENICOL ON THE RELAPSE RATE IN TYPHOID FEVER.

TYPHOID FEVER is rare in Australia nowadays; nevertheless isolated cases do occur. The immediate effect of "Chloromycetin" (chloramphenicol) on this disease is uniformly good, but even in our limited experience in this country relapses after treatment with chloramphenicol have occurred. We still have much to learn about the use of chloramphenicol in typhoid fever, and for this we must look to countries where typhoid fever is still prevalent. A. T. John and V. S. Vinagayam, of Madras,[1] state that in attempts to prevent relapses, administration of the drug has been prolonged for some days after fever and other symptoms have subsided. The lowest relapse rate so obtained was 16% in 25 cases reported by T. E. Woodward and his associates.[2] A search for a more efficient method of preventing relapses seemed to be indicated and the administration of chloramphenicol in interrupted courses was tried. Of forty patients with typhoid fever,

[1] *Lancet*, October 18, 1952.
[2] *Ann. Int. Med.*, July, 1948.

three died during treatment with chloramphenicol. All three had severe toxæmia and death occurred early in the treatment. Of twenty patients with typhoid fever treated with interrupted courses of chloramphenicol one suffered a relapse; the relapse rate thus was 5%. Of 17 patients with typhoid fever treated with single continuous courses of chloramphenicol, seven (41%) relapsed. In the authors' opinion, the relapse rate is highest when chloramphenicol is withdrawn soon after pyrexia has subsided; it is lower when therapy is continued for some days after clinical cure; but it is lowest when chloramphenicol is given in interrupted courses, being withdrawn soon after clinical cure and given again just before a relapse can be expected. John and Vinagayam state that the average total quantity of chloramphenicol used in interrupted courses is less than that used in continuous courses. They do not mention the effect of chloramphenicol on the blood count, though this is surely important in a disease characterized by leucopenia. Here again, interrupted courses have an advantage over continuous administration, since serious blood changes are more likely to occur after prolonged administration than after interrupted courses. The number of cases on which these investigators base their opinions is not large enough for their findings to be statistically significant, but the relapse rate after chloramphenicol is a serious matter, and these opinions, based on first-hand experience, should be considered seriously by anyone who is confronted with a patient with typhoid fever.

PINK DISEASE.

SIR MACFARLANE BURNET, in a critical, some might say hypercritical, estimate of the contribution of the Commonwealth to research in medical science, states that if one consults good undergraduate text-books of medicine and surgery the only reference to Australia would be "the first recognition in Australia of Pink Disease, of 'Q' fever and of the influence of rubella on pregnancy, and perhaps on one or two operative procedures developed by Australian surgeons, but nothing more".[1] We leave to others the taking up of the challenge which Sir Macfarlane Burnet has thrown down and will refer only to the interesting history of pink disease which two Zürich doctors, G. Fanconi, director of the children's clinic, and G. von Muralt, have published in the *Deutsche medizinische Wochenschrift*.[2] The first description of this condition was given in 1830 by Chardon, who published a good account of an epidemic in France and gave the disease the name which when anglicized appears in Webster's dictionary early in this century as acrodynia, a name which is now coming into general usage in the United States. In 1903 Selter in southern Germany drew attention to a similar condition which he named trophodermatoneurosis. The work of both Chardon and Selter was soon forgotten. Then came the elaborate inquiries of Feer, who in Swiss and German medical journals and books drew the attention of the clinical world to the disease and stimulated further research. Feer first pointed out the cardio-vascular complications, tachycardia and high systemic arterial blood pressure. Feer tried to explain the syndrome in terms of vago-sympathetic rivalry, and though this attitude of medical thought, popular at the time, was not generally accepted, he did so much towards arousing the interest of the clinician and pathologist that the term *Feersche Krankheit* or Feer's disease came into use in German-speaking countries and is still employed there. This syndrome was detected by Swift in Australia in 1914, and Clubb, another Australian, suggested the name pink disease.

Concerning the ætiology of the condition, there have been many and varied suggestions. A food intoxication was for some time suspected, particularly ustilago which infects cereals, but in ustilago poisoning the skin is dry and not moist as in pink disease. Then lack of vitamin B_6 for a time was held guilty, but this was supplanted by the belief that poisoning by heavy metals was responsible, at first arsenic and then mercury. Certainly Fanconi and his associates brought together a wealth of evidence incriminating mercury, but difficulties in holding this view became manifest; in Spain, for instance, where calomel is frequently administered to children, there is little acrodynia, and it was observed in many countries that healthy children could be given mercury compounds without any development of the disease. Cheek and Hicks in this journal put forward the hypothesis that underaction of the adrenal cortex is the cause. Fanconi and von Muralt in their summing up state that mercury poisoning is the leading factor at least in central Europe, but its action is indirect. Under-nourishment, particularly some forms of avitaminosis, may also precipitate the condition as also various diseases of infancy, for be it remembered that pink disease rarely attacks children over the age of five. To this verdict we may add that though Australian clinicians cannot claim true priority for the recognition of the syndrome and therein resemble their colleagues in countries other than France, they have made a notable contribution to the study of the condition and placed Australia in a position of prominence in modern medical science.

[1] *Science in Australia*, 1952, page 66.
[2] *Deutsche med. Wchnschr.*, January 2, 1953.

ACCIDENTAL AMPUTATION OF THE FINGER TIP.

ALTHOUGH it is usually classed as a minor injury, amputation of a finger tip can be serious, especially to a worker in mechanized industry where most injuries of this type occur. As Robert H. Clifford[1] points out, this disability usually prevents the injured man from performing his regular job for a month or more, occasionally forces him to change his job, and frequently leaves him with a painful and useless finger stump. Clifford states that the literature on the subject is very meagre; and although most of the articles discuss and describe the three main types of treatment, almost none of them evaluate the results. However, one statement does appear, without qualification, in most of the articles—that length must be preserved at all costs. Clifford remarks, rather drily, that because of its nobility of purpose, this statement is rarely challenged; but it should be challenged, for the preservation of a centimetre or two of finger length which may terminate in a painful and useless tip "is hardly a triumph of therapy". Between 1945 and 1949 a total of 163 patients were treated for amputation of the finger tip at Henry Ford Hospital, Detroit, and 125 of these returned for examination two years or more after operation. Clifford has investigated these 125 patients, questioning them about their work records, subjective disability and persistent symptoms, and has related the findings to the three main types of treatment: free skin graft to the stump, pedicle graft to the stump, and revision, with or without shortening, and primary closure. According to his findings, the period of disability to perform the patient's normal job was one month after revision and closure, two months after free grafting and three months after pedicle grafting. The proportion of patients forced to change their jobs because of the injury was greatest in the group treated with a pedicle graft (four out of nine), next in the free graft group (10 out of 34) and much the least in the revision and closure group (eight out of 82). Subjective complaints were mainly of lack of sensation and lack of tissue tone in the pedicle graft group and of a painful stump in the other two groups; again the proportion of complaints was much the least in the revision and closure group. Clifford agrees that the successful use of the free graft or of the pedicle graft brings "truly excellent" results, but the number of completely successful results is apparently rather disappointing. Primary repair, with or without shortening, is certainly the simplest method of the three and the practical results appear to be the most satisfactory. It seems reasonable to conclude, especially in the light of the great adaptability of the hand, that the simplest method is probably the best for the average working man.

[1] *Arch. Surg.*, September, 1952.

Abstracts from Medical Literature.

PÆDIATRICS.

Growth of Children with Tetralogy of Fallot.

GEORGE W. LUND (*J. Pediat*, November, 1952) reports a study of patients suffering from the tetralogy of Fallot. Growth studies were made with the Wetzel grid. Sixty-six patients had not been subjected to operation. The majority did not have good physique, but were not of very poor physique. As a group their speed of growth was considerably slower than might be expected in the general population. Forty-seven patients were operated on, and their growth individually compared post-operatively with the pre-operative pattern. There was no constancy in their patterns, but almost one-half of them continued to lose in growth speed as an unoperated group had, and almost one-half developed poorer physiques post-operatively than they had before. There was no correlation between success of the operation as measured in terms of exercise ability and subsequent growth.

Nitrogen Mustard in the Nephrotic Syndrome.

V. C. KELLEY AND T. C. PANUS (*J. Pediat*, November, 1952) describe the response to nitrogen mustard therapy of nine children suffering from the nephrotic syndrome. The drug was given by intravenous infusion in 5% dextrose solution, a single course of treatment consisting of 0·2 milligramme per kilogram of body weight on each of two successive days. Four of the patients had a second course of treatment, so that the response to 13 courses is reported. Diuresis resulted in nine. The diuresis occurred from one to eight days after the nitrogen mustard was given. Of the eight patients who showed a good response, four have not become œdematous again after intervals of many months. Of the remaining four patients, œdema returned in less than one month in three and after twenty-three months in the other. There was no significant rise in the serum protein level in any patient, and albuminuria was not much diminished. Serum cholesterol levels were unaffected.

Chronic Maxillary Sinusitis.

J. F. BIRRELL (*Arch. Dis. Child.*, February, 1952) describes and discusses the result of proof puncture in 240 cases of suspected chronic antritis in children. Diagnosis had been made from history, physical examination and radiology. He found pus in 9·42% and mucopus in 4·45% of the antra. In the "positive" cases proof puncture was repeated from one to four weeks later, and four patients still had pus in an antrum; of these two became free after a further puncture, and only two remained repeatedly "positive" and required intranasal antrostomy. The author calculates that X-ray examination is a very unreliable measure, and he found no significant relationship between a dull antrum or thickened lining mucosa in the X-ray film and the finding of pus on puncture. He concludes that an examination of results indicates that it is not possible to diagnose antritis accurately by any means at our disposal. He disagrees with the generally accepted theory that antritis is common in children. He claims that identical symptoms and X-ray findings may be produced by mouth-breathing, and that treatment is often better directed towards re-establishing nasal breathing than against a non-existent sinus infection.

Curd-Forming Properties of Milk Mixtures.

B. SPIER AND I. J. WOLMAN (*J. Pediat.*, November, 1952) report studies of curd-formation in cow's and goat's milk modified in various ways for infant feeding. They employed tests of curd tension and curd size modified to simulate conditions in the infant's stomach. They report that heat, dilution with water, acidification and homogenization are all effective in reducing the tendency of milk to form large tough curds in the baby's stomach. Routine pasteurization had only a slight effect. The higher the temperature and the larger the time applied, the greater is the effect. No tests of dried milks are reported. The addition of carbohydrate in itself had little effect; corn syrup derivatives had no effect and apple syrup a little, but the addition of mashed banana had an appreciable effect. It was found that goat's milk was not naturally a soft curd milk as is often claimed, but that it could be modified in the same way as cow's milk.

Surgery in Primary Thoracic Tuberculosis in Childhood.

D. THOMAS (*Proc. Roy. Soc. Med.*, November, 1952) reports the results of thoracotomy in 37 cases of thoracic tuberculosis in childhood. All the children had failed to respond to bed-rest and antibiotics. Indications for thoracotomy were stridor with cyanotic attacks, progressive enlargement of mediastinal glands in spite of conservative treatment, gross distortion of the bronchial tree and bronchiectasis, obstructive emphysema and lack of resolution or progression of the pulmonary shadow in spite of conservative treatment, particularly when accompanied by the finding of tuberculosis organisms in the gastric contents. Ten patients were submitted to hilar adenectomy only, and 27 to removal of a lobe or segments *plus* glands. One death occurred. No instance was found of pleural space infection or post-operative atelectasis in this series. The author ascribes this to the use of continuous negative suction via the drainage tubes and the nursing of the children on the contralateral side over an arched plaster case.

Causes of Fœtal and Neonatal Death.

J. B. AREY AND J. DENT (*J. Pediat.*, January and February, 1953) have demonstrated an adequate anatomical cause of death in 107 of 137 fœtuses and infants who died during the neonatal period. They state that intra-uterine anoxia, as evidenced by aspiration of excessive amounts of amniotic sac contents, was the leading cause of death, occurring in 16% of cases. Pulmonary hyaline membranes were the leading cause of death in liveborn infants, accounting for the deaths of 15 premature infants. Major congenital abnormalities were responsible for the deaths of 14 fœtuses and infants, and major anomalies were present in three others. Intraventricular hæmorrhage was the single leading cause of death of pre-viable premature liveborn infants. Bronchopneumonia was responsible for the death of 10 liveborn infants and was present in 29 other non-syphilitic fœtuses and infants. Syphilis was responsible for nine deaths. Intracranial trauma manifested by dural tears was considered the cause of death in seven, and kernicterus the primary cause in five. Prematurity, uncomplicated by other disorders, is seldom the sole cause of death. Careful examination will reveal, in addition to prematurity, a cause of death in the majority of premature infants. Histological examination of multiple sections of the lungs is an essential part of any post-mortem examination of a fœtus or newborn infant. In this series lung histological examination alone would have revealed the cause of death in 35% of the cases.

Congenital Hernia of the Diaphragm.

E. E. ARNHEIM (*Surg., Gynec. & Obst.*, September, 1952) states that the commonest site of developmental abnormality of the diaphragm is in its posterior portion. The relations of the pleuro-peritoneal opening in the fœtus and the hernial opening suggest that a persistent pleuro-peritoneal hiatus is the developmental cause. This has become known as the "foramen of Bochdalek". These types of herniæ are much more common on the left side than the right side probably because of the earlier closure of the right pleuro-peritoneal membrane and the protection of the liver. Most congenital diaphragmatic herniæ do not have a sac and there is free communication between a pleural cavity and the abdomen ("false" hernia), but if herniation occurs at a slightly later stage of development when pleural and peritoneal membranes have closed the defect, but with incomplete muscular formation, a sac of peritoneum and pleura is present ("true" hernia). The sac is a thin membrane, which is usually attached to a crescent-shaped shelf of diaphragm laterally and a segment of diaphragm medially, and is reflected over the viscera in the thorax as a hood. The most common abdominal viscera involved in congenital diaphragmatic herniæ are the small intestine and the ascending and proximal part of the transverse colon, that is, that portion of the intestinal tract derived from the mid-gut in the fœtus. Occasionally, the stomach is herniated and either the spleen or liver according to the side of the defect. The abdominal viscera appear to be arranged in a confused fashion, but it should be recalled that the intestinal loops may be found in various stages of rotation in the thorax. These changes indicate the probability that the intestines were already displaced in the fourth month of fœtal life when the fusions usually occur. Prompt surgical treatment is extremely important in the neonatal period. A waiting policy has resulted in many deaths in this age group, and too often the operation is withheld until the infant is *in extremis*. Improvements in anæsthesia allow these infants to tolerate the operation well, and an

added advantage of operation in the neonatal period is the lack of distension of the intestines with air. Positive pressure anæsthesia is of the utmost importance and is given through a small closed system with a tightly fitting face mask. The author uses an abdominal approach and an oblique subcostal incision. In the case of true herniæ with a sac, if the hiatus is large, the sac is retained and plicated to form the new diaphragmatic leaf. Follow-up studies have shown that although the sac contains no muscular tissue, the results produce satisfactory function. The author gives details of three patients whom he treated and reviews the reported cases.

Pink Disease.

D. B. CHEEK (*J. Pediat.*, February, 1953) suggests that there is a depletion of chloride and sodium ions in the vascular space in pink disease. Blood volume is decreased, with hæmoconcentration. Alkalosis is present making cell potassium deficit a possibility. There is evidence that the kidneys are excreting unduly large amounts of chloride. The presence of free oxyhæmoglobin in the plasma and raised coproporphyrin excretion suggest disturbed pigment metabolism. The author speculates that relentless sodium and chloride diuresis due to mercury might explain most of the altered physiology associated with this disease.

ORTHOPÆDIC SURGERY.

Non-Union in Compound Fractures with Infection.

M. CLEVELAND AND E. M. WINANT (*J. Bone & Joint Surg.*, July, 1952) discuss the treatment of 10 patients with ununited fractures, nine of which were infected. The cases presented three distinct problems: control of existing infection, obtaining an intact integument of a quality as good as possible, and securing union of the fracture. Before definitive bone surgery was considered, every effort was made to arrest infection. Systemic antibiotic therapy was used in all cases; in others, as indicated, local therapy, incision and drainage of abscesses, removal of foreign bodies, screws, plates and silk, sequestrectomy and *débridement* or excision of infected bone were undertaken. As a result, infection was considered to be arrested in seven of the nine cases; in two others, bone grafting was done in the presence of persistent drainage. However, of the seven cases in which infection was believed to be controlled, the wounds healed by primary intention following bone-grafting in only two. In the other five additional operative procedures (removal of foreign material, sequestrectomy and skin grafting) were necessary before the wound finally healed. In two cases pedicle skin-grafting procedures were necessary to provide an intact integument through which surgery could be initiated. In some cases bone replacement was undertaken simultaneously with measures to control infection and to secure adequate skin coverage. The authors believe that massive cortical graft is slow to become revascularized, and in this series they used only multiple chips and ribbons of fresh autogenous cancellous iliac bone. They stress the importance of immobilization of the fracture. Of the nine cases in which union of the fracture was obtained as a result of iliac bone graft, the wounds healed primarily and remained healed without recurrence of infection in only three. The one failure in this series was in a patient who had had osteomyelitis of the femoral shaft in childhood and had suffered two subsequent fractures of the femur with reactivation of infection. Eventually disarticulation of the hip was performed.

Herniated Nucleus Pulposus.

THE RESEARCH COMMITTEE OF THE AMERICAN ORTHOPÆDIC ASSOCIATION (*J. Bone & Joint Surg.*, October, 1952) has compared the end results obtained in a group of patients suffering from herniated *nucleus pulposus* treated by disk removal alone with those in a group in which a fusion operation was performed immediately after the disk was removed. Only those patients with operation performed more than five years previously were included. The upper age limit was set at forty-five years to reduce the incidence of physiological degenerative manifestations. The case material was obtained from well-recognized institutions with fully qualified surgeons. Of 1826 case records examined only 929 were found to meet the requirements of age, time limit and obvious skeletal involvement such as spondylolisthesis and fractures. Only 374 patients (269 males, 109 females) reported for examination. In group A (256 patients) disks only were removed; in group B (118 patients), in addition, spinal fusion was performed. A number of patients required subsequent operations (17% in group A, 15% in group B). The average hospital stay of group A patients was fifteen days and of group B patients fifty-eight days. The committee suggests, from this study, that if 100 patients with herniated *nucleus pulposus* are subjected to disk excision, one may expect 60 of them to obtain long-term results which are satisfactory. If they have spine fusion in addition to disk excision, 70 will obtain satisfactory results. Of these patients 60 would not have needed the fusion operation, and of the 40 whose results are unsatisfactory only 10 could have expected sufficient improvement to make them satisfactory. Furthermore, the fusion procedure is an added operation, and the committee has no reason to believe that it is more effective if performed at the time of the disk excision than at a later date as a second stage operation. The committee therefore concluded that, when surgical intervention was necessary for simple cases of herniated *nucleus pulposus*, the operation of choice was disk excision only. Spine fusion can be performed at a later date if poor results warrant additional surgery.

Elbow Joint Deformity After Erb's Obstetrical Paralysis.

J. AITKEN (*J. Bone & Joint Surg.*, August, 1952) found in 107 cases of Erb's paralysis 27 instances of incipient or actual posterior dislocation of the upper end of the radius and six of anterior dislocation, a total incidence of bony deformity of the elbow region of 30·8%. He states that anterior dislocation is a simple dislocation which may or may not be associated with Erb's paralysis; posterior dislocation commences as a subluxation, but in the older child amounts to complete dislocation. Both types are associated with less obvious deformities of the other bones of the elbow joint. Anterior dislocation is present at birth and is usually congenital in origin. Posterior dislocation is not a simple dislocation or subluxation of the normal radial head occurring in the older child, as suggested in the literature, but commences in infancy and is associated with altered bone growth. Evidence of bony malformation and of incipient posterior subluxation of the radial head can be seen radiographically as early as two months of age, long before there is clinical evidence of deformity. In the older child limitation of active and passive movement is notable and is much greater than is warranted by the degree of residual paralysis or the presence of contractures. The author found that the degree of paralysis had to be greater than would admit of complete or nearly complete recovery, but not so severe as to preclude some recovery. Patients with "neuritis" of the plexus causing irritability and tenderness of the non-paralysed muscles are specially prone to develop changes in the radius and ulna at the elbow joint; no instance was encountered of the deformity arising in a neglected or untreated patient. The author believes that muscle imbalance and rigid splinting over a long period are the probable causes of deformity of the elbow. He found early clinical detection difficult because of the natural non-cooperation of babies. Muscle spasm, resistance to passive movements and tenderness of the plexus were regarded seriously and called for radiographic examination. Radiologically the impending displacement could be detected with certainty. Clubbing of the upper radial metaphysis was followed by notching of its anterior aspect. Increased ulnar curvature and slight backward displacement of the upper end of the radius were noted, with deficient growth of bones as shown by the small capitular centre. The changes were observed from birth up to seven months. Later, as age increased, the radial displacement and ulnar curve increased, and between the ages of five and eight years the head became completely dislocated. The author believes that these deformities are caused by forcing the upper limb, some muscles of which are spastic and others paralysed, into a too fully corrected position imposed by the Fairbank type of splint, and by retaining it over an unduly long period. Recently the author has changed the treatment of patients who were exhibiting signs of impending displacement or were of a type likely to develop it. As soon as it was clear that subluxation was a possibility, an abduction splint was fitted which only half flexed the elbow and supported the forearm in mid-pronation. Thrice daily the splint was removed, and all joints of the arm were put through their full range of movement by the parent. As soon as the biceps and brachialis were working, the splint was discarded during the day; when general recovery was satisfactory, it was discarded altogether. Later this treatment was adopted as a routine in all cases of Erb's paralysis, and so far no new case of incipient subluxation has been encountered.

Special Articles for the Clinician.

(CONTRIBUTED BY REQUEST.)

LXI.

PROFESSIONAL SECRECY.

THE principle of professional secrecy is simple as it concerns patient and doctor only. No information which the patient has given, under the implied promise of secrecy, shall be divulged by the doctor to any other party whatsoever. This confidential relationship and understanding are essential in the public interest.

It is where observance of this rule might seem to involve prejudice to the interests of, or possible danger to, some third party, whether an individual or the social group, that ethical problems arise for the doctor. He may besides be required in a court of law to divulge information against his professional duty of secrecy. Much effort has accordingly been directed to the formulation of rules which may enable the doctor to reconcile a duty to his patient with the interests of other parties or of society.

Since the time of Hippocrates it has been one of the strictest principles of medical ethics that it is the physician's duty to keep inviolate the secrets entrusted to him by his patients. So strict is this confidence that the courts generally speaking recognize it as a moral duty. And although there is in this country no direct authority, it may be assumed that a doctor would be legally liable for damages sustained by a patient through wrongful disclosure of confidences. In the Kitson *versus* Playfair case in England, for example, a medical man attended the wife of his brother for what he considered to be an abortion. He communicated his suspicions to another relative, as he thought the wife guilty of misconduct (the husband being abroad at the time). This came to the knowledge of the wife, who sued the doctor and recovered damages to the amount of £12,000, £2000 more than she had asked.

In ordinary relationships, where the authority of the State is not invoked, a doctor deals with problems of secrecy at his discretion. As it is impossible for him to know what information about one of his patients might be to the latter's disadvantage, if divulged, the rule, ideally, must be that he should never reveal anything whatever, even his having seen the patient at all.

To quote a concrete example. A woman telephoned a doctor, saying: "I am very worried about my sister, who is coming to see you today, and will call to see you about her tomorrow." The doctor wisely said, after examining the patient: "If your sister comes to see me, have I your consent to tell her about your illness?" To his surprise the patient replied: "Certainly not." And probably the sister was even more surprised when informed that the doctor had nothing to tell her.

The golden rule is: Firmly refuse to give any information whatever about a patient to any third party—husband, wife or other relative (except in the case of minors under their guardianship). Moreover, if there is the least suspicion of a sinister background the consent should be obtained in writing. The information should be given only to the accredited individual after making sure of his identity; never on the telephone to a person claiming to be entitled to receive it.

Frequently an employer refers an employee to a doctor for medical examination, the employer paying the fee and desiring a report. Before making the examination the doctor should assure himself that the employee is willing to be examined, and to have the information gleaned conveyed to the employer. It is wise to inquire, also, if the patient is under the care of a doctor, and if so, to refuse to examine him except in consultation with his doctor, or with the latter's express consent. It should be ascertained, too, whether the other doctor has already supplied a report on the illness.

Difficulties often arise when a medical practitioner is required to give evidence in a court of law. The law decrees some exemptions from the rule of professional secrecy, for example, certificates of death and notifications of infectious diseases. In some countries, among them France, disclosure of medical secrets is a criminal offence. Some of the American States regard information obtained from a patient, and necessary to enable the practitioner to treat him, as privileged.

Except in Victoria, and then only in civil cases, no privilege is allowed to medical practitioners in Australia (privilege meaning the right to refuse to divulge information learnt in professional intercourse). Notwithstanding this, the doctor should always preserve the secrets which have been entrusted to him and should, except with his patient's consent, answer questions only at the direction of the judge. His proper course, if he is asked to divulge professional secrets, is to object and appeal to the judge, who will not direct him to comply if he thinks this would not be in the interests of justice.

If he refuses, when directed to tell what he knows, he is liable to be found guilty of contempt of court. Such refusal can be justified only in very exceptional circumstances, and generally a medical witness would be well advised to obey the court. If the circumstances are so exceptional that the doctor believes he would, in refusing to divulge information, be acting in accordance with the highest principles of medical ethics, he should refuse only after consultation with someone capable of advising him.

To this rule of professional secrecy the law decrees certain exceptions, for example, the notification of infectious diseases. For another instance, the judge in a court of law may direct the doctor to give information in respect of a life insurance examination. But information given to life insurance companies against whom the patient had a claim would not come within this category. It is the practitioner's duty, in respect of reports to such companies, simply to state what he finds, without in any way giving an opinion as to how the disease was acquired; and he should never state whether or not in his opinion the disease was due to the patient's misconduct.

The practitioner should avoid making any statement likely to be a ground for libel. If any condemnatory report has to be given, for example, that the patient is malingering, in order that the practitioner may be protected and not open to any action, it should be written by the practitioner himself, not dictated to an attendant, and should be marked "confidential".

Very often it is in the interests of a patient that a report on his state of health be furnished to a third party. The report should, then, be handed to the patient himself, to be used as he may think fit. If the report has to be sent direct to the other person, the patient's consent should first be obtained.

If a magistrate, police officer, coroner or other authority requests a medical practitioner to examine a patient, for example, a prisoner, he should not do so, even though there may be statutory permission, without the patient's consent, and then only after warning him that the result of the examination may be used in evidence against him.

With regard to children under age, the consent of a parent must be obtained, and the result may be given to the parent. With regard to children over age, the parent has, however, no right to demand the result of an examination.

A doctor should not examine an employee at the request of the employer without the former's consent, preferably in writing, and without warning him or her that the result will be conveyed to the employer. Failure to do so may involve the doctor in an action for damages.

To consider another point of view: The practitioner must always bear in mind that he may, in refusing to divulge information, be doing harm to an innocent third party. Accordingly, if such circumstances arise, he should endeavour to persuade the patient that he should himself disclose the information. Should the patient refuse, the practitioner may have to consider taking the law into his own hands; but this course should be taken only where there seems to be no alternative means of protecting innocent people, and only after full consideration of all the circumstances and as a last resort. Otherwise the practitioner, besides committing a breach of ethics, might find himself sued for libel if any defamatory statement should have been made. The case may arise, however, in which he feels that he is under a moral obligation to impart his knowledge to another party for his or her protection. The law in certain circumstances admits this obligation and absolves him from legal sanctions; for example, notification of an infectious disease to a local authority is said to be a "privileged" communication. But the communication must be made to one person only, and that person must have some direct interest in it, or some duty. Thus a communication made by a practitioner to the manager of swimming baths, regarding a young man with a syphilitic sore on the penis, was held by the court, before whom the young man brought an action for slander, to be privileged.

It has frequently been urged that doctors should volunteer information which would lead to the discovery of a crime; for instance, the procuring of abortion. Yet this must be strongly opposed, for the reason that nothing should be done which would in any way tend to deny people the right of consulting a doctor in the knowledge that their confidences will be preserved.

As abortion often involves problems of special difficulty, the Royal College of Physicians of England some years ago adopted a series of resolutions, after these had been submitted to the Crown Prosecutor for his approval. They are as follows: (i) That a moral obligation rests upon every medical practitioner to respect the confidence of his patient; and that without her consent he is not justified in disclosing information obtained in the course of his professional attendance on her. (ii) That every medical practitioner who is convinced that criminal abortion has been practised on his patient should urge her, especially when she is likely to die, to make a statement which may be taken as evidence against the person who has performed the operation, provided always that her chances of recovery are not thereby prejudiced. (iii) That in the event of her refusal to make such a statement, he is under no legal obligation (so the College is advised) to take further action, but he should continue to attend the patient to the best of his ability. (iv) That before taking any action which may lead to legal proceedings, a medical practitioner will be wise to obtain the best medical and legal advice available, both to ensure that the patient's statement may have value as legal evidence and to safeguard his own interests, since in the present state of the law there is no certainty that he will be protected against subsequent litigation. (v) That if the patient should die, he should refuse to give a certificate of the cause of death and should communicate with the coroner.

A practitioner will certainly not take any share in the concealment of crime, but it is not part of his duty to investigate the value of suspicious facts, or to repeat hearsay statements, or to act as police agent.

The legislature in Queensland has dealt with the subject of medical secrecy in the *Medical Practitioners Act*. Among other provisions this decrees that a doctor shall be deemed guilty of misconduct in a professional respect if, on obtaining information which indicates an attempted or completed crime, or any illegal operation, or if when called to treat any wound from a cutting instrument or other weapon, not being a firearm, which he is not satisfied was accidentally incurred, or to treat any wound from a bullet, he fails to call in another doctor for consultation, and to advise the Director-General of Health immediately of any such information. The Act does not state that any practitioner who makes a report concerning a patient will be privileged and protected.

The question of professional secrecy does not arise in the case in which a doctor suspects that an attempt is being made to poison a patient whom he is attending. The doctor then either should insist on a consultation at the bedside with another doctor, and quick removal of the patient to hospital, or should confidentially report his suspicions to the authorities.

J. G. HUNTER,
Sydney.

British Medical Association News.

ANNUAL MEETING.

THE annual meeting of the New South Wales Branch of the British Medical Association was held at the Robert H. Todd Assembly Hall, British Medical Association House, 135 Macquarie Street, Sydney, on March 26, 1953, DR. R. H. MACDONALD, the President, in the chair.

ANNUAL REPORT OF COUNCIL.

The annual report of the Council was received and adopted on the motion of Dr. H. R. R. Grieve, seconded by Dr. T. Y. Nelson. The report is as follows:

The Council presents the following report on the work of the Branch for the year ended March 26, 1953.

Membership.

The membership of the Branch is now 3574, as against 3360 at the date of the last report. The additions have included 330 elections, reelections and resumptions, and 59 removals into the area of the Branch; while the losses have included 15 by resignation, 96 removals out of the area of the Branch, 29 by default in payment of subscription, and 35 by death. The losses by death were as follows: Dr. W. S. Gleeson, Dr. M. Giommi, Dr. J. H. Hornbrook, Dr. H. C. Finn, Dr. G. Alagna, Dr. F. Guy Griffiths, Dr. J. McVittie, Dr. C. K. Cohen, Dr. R. J. Pope, Dr. C. R. Sim, Dr. P. S. Parkinson, Dr. R. D. Mulvey, M.C., Dr. R. J. Taylor, M.C., Dr. T. G. Ross, D.S.O., Dr. H. Strauss, Dr. G. E. Phillips, Dr. R. Sheldon, Dr. E. W. Fairfax, Dr. P. J. O'Shea, D.S.O., M.C., Dr. W. K. Muston, Dr. H. H. Holland, Dr. J. G. Lentaigne, Dr. H. S. Thomas, Dr. J. N. Carter, Dr. N. M. A. Alexander, Dr. Stuart Kay, Dr. J. G. Waine, Dr. C. W. W. Murray, Dr. J. B. W. Meredith, Dr. C. Purser, Dr. W. F. S. Yeates, Dr. G. Cummins, Dr. A. C. Telfer, Dr. A. R. Fletcher, Dr. E. J. Brooks.

Congratulations.

Congratulations were extended to Sir Hugh Poate, K.B., and to Sir Norman McAlister Gregg, K.B., on the distinguished honour of knighthood being conferred upon them by Her Majesty the Queen.

Meetings.

Nine ordinary meetings of the Branch (including the annual general meeting), three extraordinary meetings of the Branch, and ten clinical meetings were held; the average attendance was 110.

Seven ordinary meetings were held in conjunction with meetings of the special groups, namely: April 24, with the Section of Medicine and the Section of Pathology; May 29, with the Section of Obstetrics and Gynæcology and the Dermatological Association of Australia (B.M.A.); June 26, with the Orthopædic Group (B.M.A.) and the Section of Medicine; September 25, with the Section of Medicine and the Section of Neurology, Psychiatry and Neurosurgery; October 25, with the Section of Medicine, the Section of Surgery and the Section of Pathology; November 27, with the Section of Pædiatrics and the Section of Surgery; December 11, with the Section of Anæsthesia and the Section of Surgery. At the ordinary meeting on July 31 an address was given by Professor Frank J. Fenner, Professor of Microbiology in the Australian National University. Seventeen papers were presented at these meetings.

The clinical meetings were held at the Rachel Forster Hospital for Women and Children, Royal North Shore Hospital, Royal Prince Alfred Hospital, Royal Alexandra Hospital for Children, Saint Vincent's Hospital, Lewisham Hospital, Sydney Hospital, Royal Hospital for Women, Broughton Hall Psychiatric Clinic, and Saint George Hospital.

At the extraordinary general meeting held on August 13, consideration was given to the Pensioner Medical Service of the Commonwealth Government.

At an extraordinary general meeting held on February 27, 1953, the Articles of Association, Articles 37, 40 (1), 53 and 56, were amended so as to provide that a vice-president, of whom there shall not be more than one at any one time, shall be a member of Council.

At the second extraordinary general meeting held on February 27, 1953, consideration was given to the medical benefits scheme of the Commonwealth Government.

In accordance with the policy of the Council, decided upon last year, the first Branch Meeting in a country town was held at Orange, Saturday and Sunday, October 25 and 26, 1952. The meeting was most successful from every point of view, 55 members being present and four papers being read. The Section of Medicine, the Section of Surgery and the Section of Pathology combined in the presentation of the papers. In addition to a scientific programme, social functions and sporting events were arranged by the Western Medical Association. The Council extends its grateful thanks to the Western Medical Association for its assistance in the organization of the meeting.

Representatives.

The Branch was represented as follows:

1. Council of the British Medical Association (1953-1955): Dr. Isaac Jones.
2. Representative Body of the British Medical Association (1952-1953): Dr. A. M. McIntosh.
3. Federal Council of the British Medical Association in Australia: Dr. A. J. Collins, D.S.O., M.C., Dr. H. R. R. Grieve, Dr. W. F. Simmons, Dr. A. J. Murray, O.B.E.
4. Australasian Medical Publishing Company, Limited: Dr. W. F. Simmons, Dr. W. L. Calov, Professor L. F. Dods, M.V.O.

5. New South Wales Post-Graduate Committee in Medicine: Dr. A. C. Thomas, Dr. E. F. Thomson.
6. The Ophthalmic Association, Limited: Dr. E. V. Waddy Pockley.
7. The Flying Doctor Service of Australia: Representative, Dr. George Bell, O.B.E.; Deputy Representative, Dr. J. G. Hunter.
8. Council of the Bush Nursing Association: Dr. R. H. Macdonald.
9. Hospitals Contribution Fund of New South Wales: Dr. Hugh Hunter.
10. St. John Ambulance Association: Dr. R. H. Macdonald.
11. Standards Association of Australia: (i) Institutional Supplies Committee, Dr. S. W. G. Ratcliff; (ii) Sectional Committee on Interior Illumination of Buildings, Dr. N. M. Macindoe; (iii) Committee on Standards of Laboratory Glassware and Volumetric Glassware, Dr. F. S. Hansman; (iv) Committee on Protective Glass for Welding, Dr. N. M. Macindoe; (v) New South Wales Committee on Protective Occupational Clothing, Dr. W. T. Nelson; (vi) Paint and Varnish Subcommittee Number 8, Dr. W. T. Nelson; (vii) New South Wales Committee on Eye Protection, Dr. N. M. Macindoe; (viii) Sectional Committee on Measuring Cups and Spoons, Dr. W. W. Ingram; (ix) Conference on Standards for Breathing Apparatus, Masks and Associated Equipment, Dr. W. E. George.
12. Medical Officers' Relief Fund (Federal): Local Committee of Management for New South Wales, Dr. E. H. M. Stephen, Dr. A. J. Murray, O.B.E., Dr. A. J. Collins, D.S.O., M.C.
13. Medical Appointments Advisory Committee (Hospitals Commission of New South Wales): Dr. B. T. Edye.
14. Special Departmental Committee for the Investigation of Maternal Deaths: Dr. E. A. Tivey.
15. Recreation and Leadership Movement: Professor Harvey Sutton.
16. Council of the Royal Society for the Welfare of Mothers and Babies: Sir Robert Wade, Dr. E. H. M. Stephen.
17. New South Wales Medical Board: Dr. J. R. Ryan.
18. Council of the New South Wales Institute of Hospital Almoners: Dr. R. A. R. Green.
19. Examining Council of the Society of Laboratory Technicians of Australasia (New South Wales Branch): Dr. F. S. Hansman, Dr. E. F. Thomson.
20. Medical Finance Limited, Board of Directors: Dr. E. A. Tivey, Dr. A. C. Thomas, Dr. George Bell, O.B.E., Dr. G. C. Halliday.
21. Council of the New South Wales Institute of Dietitians: Dr. K. S. Harrison.
22. Coordinating Council for the Physically Handicapped: Dr. R. A. R. Green.
23. Road Safety Council of New South Wales: Dr. R. H. Macdonald; Committee for the Determination of Visual Standards for Motor Drivers, Sir Norman McAlister Gregg, K.B.; Committee for the Determination of Physical Fitness of Drivers of Motor Vehicles, Dr. J. H. Halliday; Committee to Examine and Report on Matters Dealing with Road Accidents Involving Motor Cycles, Dr. I. D. Miller.
24. Federal Medical War Relief Fund: Local Committee of Management, Dr. A. J. Collins, D.S.O., M.C., Dr. A. C. Thomas, Dr. A. J. Murray, O.B.E.
25. Florence Nightingale Memorial Committee of Australia: Dr. B. T. Edye.
26. National Association for the Prevention of Tuberculosis in Australia, New South Wales Division: Coordinating Committee, Dr. W. Cotter B. Harvey.
27. The Committee for Placement of Resident Medical Officers: Dr. G. F. Elliott.
28. Australian Physiotherapy Association: Dr. B. G. Wade.
29. University of Sydney: Centenary Celebration Committee, Dr. G. C. Halliday.
30. The Cavalcade of Nursing Committee: Dr. H. R. R. Grieve.
31. New South Wales State Cancer Committee and Cancer Advisory Committee: Dr. B. T. Edye.
32. Council of the Pædiatric Association Limited: Dr. G. L. Howe.
33. Department of Motor Transport: Committee to Consider the Question of the Adoption of Chemical Tests of Body Fluids to Determine Whether a Driver is Under the Influence of Alcohol: Dr. F. S. Hansman.
34. Chiropody Board of New South Wales: Dr. R. H. Macdonald, Dr. S. Scougall, Dr. R. F. A. Becke.
35. Medico-Pharmaceutical Liaison Committee: Dr. J. K. Maddox, Dr. G. L. Howe, Dr. W. F. Simmons, Dr. J. G. Hunter.
36. Department of Public Health: Poisons Advisory Committee, Dr. A. W. Morrow, D.S.O.
37. National Health Service: Pensioner Medical Service, Committee of Inquiry, Dr. M. S. Alexander, O.B.E., Dr. B. A. Cook, Dr. A. W. Morrow, D.S.O., Dr. A. C. Thomas.

Council.

(*a*) The attendance of members of the Council and of the standing committees was as set out in the accompanying table.

(*b*) The representatives of the Local Associations of Members appointed on the invitation of the Council to attend

ATTENDANCE AT COUNCIL AND STANDING COMMITTEE MEETINGS.

	Council.	Committees.				
		Executive and Finance.	Organization and Science.	Medical Politics.	Hospitals.	Ethics.
ALEXANDER, M. S.	9	—	—	11	—	—
ANDERSON, PHYLLIS M.	10	—	3	—	—	—
BELL, GEORGE. Honorary Treasurer	10	12	4	9	3	2
BLACKBURN, SIR CHARLES	6	—	—	—	—	2
COLLINS, A. J.[1]	3	—	—	—	—	—
COOK, B. A.	8	—	—	5	2	—
DEAKIN, J. E. F.	10	—	—	—	4	3
DOWLING, J. M.	7	—	—	—	—	—
EDYE, B. T.	9	—	—	—	—	4
ELLIOTT, G. F.	8	—	—	—	4	—
GRIEVE, H. R. R. Honorary Secretary	10	9	2	8	1	3
HALLIDAY, G. C.	10	11	—	—	—	4
HOWE, G. L.	9	11	—	11	—	—
JOHNSON, A. S.	9	—	3	—	—	—
MACDONALD, R. H. President	9	12	4	11	3	2
MORROW, A. W.	8	—	2	—	3	—
MURRAY, A. J. President-Elect	10	12	4	3	3	2
NELSON, T. Y.	9	—	—	11	4	—
RAWLE, K. C. T. Past President	8	5	—	—	—	—
RUTHERFORD, J.	10	—	—	—	—	—
SIMMONS, W. F.	10	12	—	10	—	—
SOLLING, F. P. M.[2]	5	—	—	3	—	—
THOMAS, A. C.	8	9	—	—	—	4
THOMSON, E. F.	9	—	5	—	—	—
WILLIS, H. H.	9	—	—	10	4	—
Meetings held	10	12	5	12	4	4

[1] Appointed to Council December 22, 1952, Article 41.

[2] Resigned December 22, 1952.

the regular quarterly meetings of the Council were as follows: Dr. W. McP. Roberts (Blue Mountains), Dr. L. S. Woods (Border), Dr. J. A. Paul (Brisbane Water District), Dr. L. Abramovich (Canterbury-Bankstown), Dr. G. N. M. Aitkens (Central Western), Dr. J. R. Sands (Eastern Suburbs), Dr. A. McNeil (Eastern District), Dr. W. A. Conolly (Hunter Valley), Dr. G. W. Ashby (Illawarra Suburbs), Dr. C. Warburton (Kuring-gai District), Dr. K. J. B. Davis (Northern District), Dr. R. M. G. Holmes (Southern District), Dr. A. M. Harper (South Eastern), Dr. C. H. Jaede (South Sydney), Dr. E. S. Stuckey (Warringah District), Dr. G. B. Downes (Western), Dr. S. Lackey (Western Suburbs).

Library.

Dr. A. J. Murray was appointed to the position of Honorary Librarian.

Visitors to the library	6689
Books lent to members	1322
Journals lent to members	4421
Books added to the library	128
Journals added to the library	14

It is most gratifying to note that the numbers of visitors to the library and the books and journals borrowed have increased as compared with the 1951-1952 period.

In 1952 the New South Wales Branch of the British Medical Association in Australia, with the support of the Federal Council of that body, decided to send Miss M. Rolleston, Librarian, abroad for the purpose of visiting medical libraries in the United States of America, Canada and the United Kingdom. A report on the visit was prepared by Miss Rolleston and forwarded to the Branch Libraries and kindred institutions.

The Association is pleased to record its grateful thanks for donations received from the following: the Editor, THE MEDICAL JOURNAL OF AUSTRALIA; Alfred Hospital, Melbourne; American College of Surgeons; Dr. B. P. Anderson-Stuart; Armed Forces Medical Library, Washington; Mr. James F. Ballard, Boston Medical Library; Dr. J. C. Belisario; Birmingham Regional Hospital Board; British Council; British Empire Cancer Campaign; Commonwealth Scientific and Industrial Research Organization, Melbourne; Dr. T. J. B. Connelley; Dr. H. C. R. Darling; Dr. C. F. A. de Monchaux; Director-General of Public Health; Dr. E. W. Frecker; Dr. A. R. Hamilton; Dr. H. H. Kessler, Newark, New Jersey; Library of the Medical and Chirurgical Faculty of the State of Maryland; the Mayo Clinic; Dr. A. E. M. Moir; National Institute of Health Library, Bethesda; Organization for Scientific Research, Indonesia; Dr. Keith Parker; Post-Graduate Committee in Medicine, University of Sydney; Public Health Department; Dr. A. C. R. Sharp; Dr. R. J. Silverton; South Pacific Commission; Dr. K. W. Starr; Dr. E. H. Stokes; United Kingdom Information Office; United Kingdom Information Officer of the Office of the High Commissioner; United States Information Library; University of Melbourne; Vanderbilt University, Tennessee; the Section of Neurology, Psychiatry and Neurosurgery; the Section of Obstetrics and Gynæcology; the Section of Pathology; the College of Radiologists (Australia and New Zealand); the Oto-Rhino-Laryngological Society of New South Wales (B.M.A.); the Section of Medicine; and the Dermatological Association of Australia (B.M.A.).

Affiliated Local Associations of Members.

Blue Mountains (affiliated 1944): *Chairman*, Dr. George T. Ferris; *Honorary Secretary*, Dr. Martin J. Flood. Membership 29. Four meetings were held.

Border (affiliated 1908): *Chairman*, Dr. R. A. Robertson; *Honorary Secretary*, Dr. H. Webber. Membership 19. Four meetings were held.

Brisbane Water District (affiliated 1948): *Chairman*, Dr. H. B. Little; *Honorary Secretary*, Dr. A. B. Paul. Membership 16. Four meetings were held.

Broken Hill (affiliated 1942): *Chairman*, Dr. J. T. Cullen; *Honorary Secretary*, Dr. Franziska Schlink. Membership 14. Twelve meetings were held.

Canterbury-Bankstown (affiliated 1930): *Chairman*, Dr. C. R. Ratcliff; *Honorary Secretary*, Dr. J. T. St. Leger Moss. Membership 58. Three meetings were held.

Central Northern (affiliated 1910): *Chairman*, Dr. L. N. Ferrari; *Honorary Secretary*, Dr. H. W. Rundle. Membership 102. Four meetings were held.

Central Southern (affiliated 1909): *Chairman*, Dr. W. N. Newton; *Honorary Secretary*, Dr. J. P. Lyttle. Membership 44. Two meetings were held.

Central Western (affiliated 1910): *Chairman*, Dr. P. C. P. Waugh; *Honorary Secretary*, Dr. K. S. M. Brown. Membership 69. Four meetings were held.

Eastern District (affiliated 1913): *Chairman*, Dr. F. Bayldon; *Honorary Secretary*, Dr. A. McNeil. Membership 30. Two meetings were held.

Eastern Suburbs (affiliated 1911): *Chairman*, Dr. H. N. Merrington; *Honorary Secretary*, Dr. J. Radford. Membership 121. Five meetings were held.

Far South Coast and Tablelands (affiliated 1935): *Chairman*, Dr. J. McKee; *Honorary Secretary*, Dr. W. P. H. Dakin. Membership 13. Two meetings were held.

Hunter Valley (affiliated 1947): *Chairman*, Dr. R. T. Dalton; *Honorary Secretary*, Dr. D. Lawson. Membership 43. Five meetings were held.

Illawarra Suburbs (affiliated 1913): *Chairman*, Dr. C. Everingham; *Honorary Secretary*, Dr. G. W. Ashby. Membership 99. Five meetings were held.

Kuring-gai District (affiliated 1929): *Chairman*, Dr. C. Warburton; *Honorary Secretary*, Dr. R. C. White. Membership 87. Five meetings were held.

Northern District (affiliated 1911): *Chairman*, Dr. H. Beattie; *Honorary Secretary*, Dr. H. G. Royle. Membership 67. Two meetings were held.

North Eastern (affiliated 1913): *Chairman*, Dr. W. Cletus Smith; *Honorary Secretary*, Dr. N. E. Brand. Membership 65. Three meetings were held.

Southern District (affiliated 1909): *Chairman*, Dr. H. W. Austin; *Honorary Secretary*, Dr. J. Oliver. Membership 21. Two meetings were held.

South Eastern (affiliated 1941): *Chairman*, Dr. B. A. Cook; *Honorary Secretary*, Dr. M. C. McKinnon. Membership 40. Six meetings were held.

South Sydney (affiliated 1909): *Chairman*, Dr. S. C. Maynard; *Honorary Secretary*, Dr. C. H. Jaede. Membership 44. Two meetings were held.

Warringah District (affiliated 1929): *Chairman*, Dr. M. H. Elliot-Smith; *Honorary Secretary*, Dr. R. T. C. Hughes. Membership 147. Four meetings were held.

Western (affiliated 1908): *Chairman*, Dr. K. H. Broome; *Honorary Secretary*, Dr. S. R. Dawes. Membership 100. Three meetings were held.

Western Suburbs (affiliated 1908): *Chairman*, Dr. M. S. Alexander; *Honorary Secretary*, Dr. L. S. Hughes. Membership 121. Five meetings were held.

Annual Meeting of Delegates.

The thirty-ninth annual meeting of delegates of the affiliated local associations of members with the Council was held on Friday, October 3, 1952.

The delegates present at the meeting were as follows: Blue Mountains, Dr. W. McP. Roberts; Border, Dr. M. M. Ramsden; Broken Hill, Dr. J. T. Cullen; Brisbane Water District, Dr. A. B. Paul; Canterbury-Bankstown, Dr. L. Abramovich; Central Southern, Dr. J. P. Lyttle; Central Northern, Dr. K. Johns; Central Western, Dr. G. N. M. Aitkens; Eastern Suburbs, Dr. A. D. J. Frost; Eastern District, Dr. A. McNeil; Far South Coast and Tablelands, Dr. W. P. H. Dakin; Hunter Valley, Dr. L. O. Rutherford; Illawarra Suburbs, Dr. G. W. Ashby; Kuring-gai District, Dr. B. T. Lovell; Northern District, Dr. R. J. Jackson; North Eastern, Dr. J. L. Roberts; Southern District, Dr. J. S. Storey; South Eastern, Dr. A. McL. Harper; South Sydney, Dr. C. H. Jaede; Warringah District, Dr. E. S. Stuckey; Western, Dr. G. B. Downes; Western Suburbs, Dr. S. Lackey.

Special Groups for the Study of Special Branches of Medical Knowledge.

Allergy (inaugurated 1947): *Chairman*, Dr. R. S. Steel; *Honorary Secretary*, Dr. Bernard Riley. Membership 11. Four meetings were held.

Anæsthesia (inaugurated 1934): *Chairman*, Dr. Gwenifer Bernard; *Honorary Secretary*, Dr. R. B. Speirs. Membership 36. Five meetings were held, one in conjunction with a meeting of the Branch.

Medicine (inaugurated 1924): *Chairman*, Dr. W. E. Fisher; *Honorary Secretary*, Dr. James Isbister. Membership 76. Seven meetings were held, four in conjunction with meetings of the Branch.

Neurology, Psychiatry and Neurosurgery (inaugurated 1924): *Chairman*, Dr. N. E. Kirkwood; *Honorary Secretary*, Dr. F. J. Scanlan. Membership 93. Eight meetings were held, one in conjunction with a meeting of the Branch.

Obstetrics and Gynæcology (inaugurated 1925): *Chairman*, Dr. R. B. C. Stevenson; *Honorary Secretary*, Dr. F. N. Chenhall. Membership 111. Six meetings were held. one in conjunction with a meeting of the Branch.

Occupational Medicine (inaugurated 1952): *Chairman*, Dr. M. R. Finlayson; *Honorary Secretary*, Dr. Gordon C. Smith. Membership 50. Three meetings were held.

Orthopædic Group (British Medical Association) (inaugurated 1923): *Chairman*, Dr. W. D. Sturrock; *Honorary Secretary*, Dr. A. I. Rhydderch. Membership 17. Five meetings were held, one in conjunction with a meeting of the Branch.

Oto-Rhino-Laryngological Society of New South Wales (inaugurated 1924): *Chairman*, Dr. V. Bulteau; *Honorary Secretary*, Dr. R. G. Mackay. Membership 51. Three meetings were held.

Pædiatrics (inaugurated 1924): *Chairman*, Dr. S. E. L. Stening; *Honorary Secretary*, Dr. S. E. J. Robertson. Membership 85. Ten meetings were held, one in conjunction with a meeting of the Branch.

Pathology (inaugurated 1924): *Chairman*, Dr. V. J. McGovern; *Honorary Secretary*, Dr. J. M. Garvan. Membership 80. Seven meetings were held, two in conjunction with meetings of the Branch.

Radiology (inaugurated 1926): *Chairman*, Dr. D. G. Maitland; *Honorary Secretary*, Dr. E. W. Frecker. Membership 86. Six meetings were held.

Surgery (inaugurated 1925): *Chairman*, Dr. A. C. Thomas; *Honorary Secretary*, Dr. F. F. Rundle. Membership 55. Five meetings were held, three in conjunction with meetings of the Branch.

Urology (inaugurated 1940): *Chairman*, Dr. M. S. S. Earlam; *Honorary Secretary*, Dr. H. G. Cummine. Membership 14. No meetings were held.

Permission was given for the formation of the Section of Occupational Medicine. The objects of the Section are to advance the knowledge, practice and status of occupational medicine. Membership is open to any member of the British Medical Association. The Honorary Secretary is Dr. Gordon C. Smith, School of Public Health and Tropical Medicine, The University of Sydney.

British Medical Association Lectures.

Dr. R. B. Perkins delivered a lecture to the Northern District Medical Association at a meeting at Armidale on December 14, 1952. The subject of the lecture was "Treatment of Common Skin Diseases".

Federal Council of the British Medical Association in Australia.

The Federal Council of the British Medical Association in Australia met in Melbourne on August 21, 22 and 23, 1952, and in Sydney on February 23, 24 and 25, 1953.

At these meetings the Branch was represented by Dr. A. J. Collins, Dr. H. R. R. Grieve, Dr. W. F. Simmons and Dr. A. J. Murray.

Australasian Medical Congress (British Medical Association), Ninth Session.

The Council has accepted the invitation of the Federal Council of the British Medical Association in Australia to hold the Ninth Session of the Australasian Medical Congress in Sydney.

Tentative arrangements have been made for the Congress to be held at the University of Sydney in August, 1955.

Dr. A. J. Collins has been appointed President of the Congress.

Secretariat.

Due to the ever increasing amount of work and responsibilities associated with the financial affairs of the Association, the Council found it necessary to terminate the appointment of a Financial Secretary and to appoint instead a full-time accountant to the secretarial staff.

The accountant is Mr. G. D. Alexander, who commenced duty on March 31, 1952.

Committee for Placement of Resident Medical Officers.

The Committee for Placement of Resident Medical Officers was called upon to function following the final degree examination in medicine at the end of 1952 and the deferred final degree examination of the previous year.

Owing to financial restrictions many hospitals found themselves in the position of being unable to offer the same number of appointments for successful candidates of the final degree examination in 1952 as they did in 1951. A deputation of the Committee accompanied by Sir Charles Blackburn, Chancellor of the University of Sydney, interviewed the Honourable M. O'Sullivan, Minister for Health, and sought financial aid from the New South Wales Government for the purpose of alleviating the position. This help was forthcoming and as a result of it and of the assistance received from hospitals in New Zealand and Western Australia the Committee was able to offer positions to all successful candidates of the examination who were desirous of obtaining appointments and who had not been placed by the teaching hospitals.

Some difficulty was experienced following the deferred examination, but here again those who were desirous of obtaining appointments were eventually placed.

Dr. G. F. Elliott replaced Dr. A. M. McIntosh as the Association's representative on the Committee.

Federal Medical War Relief Fund.

The Council wishes to express its appreciation of the fine response by members to the special appeal made on October 20, 1952, for contributions to the Federal Medical War Relief Fund. This appeal resulted in £724 being subscribed up to March 13, 1953. In the earlier part of the year a sum of £94 was subscribed, making a total of £818 for the year.

A most generous gift to the Fund of £stg.500 (£A625) was forwarded to the Federal Council by the Parent Body in England.

National Health Service.

An extraordinary general meeting of the Association was held in the Robert H. Todd Assembly Hall on February 27, 1953, for the purpose of giving consideration to the Medical Benefits Scheme of the Commonwealth Government.

The meeting was addressed by Dr. A. J. Collins, President, Federal Council of the British Medical Association in Australia, Dr. H. R. R. Grieve, Honorary Secretary, who is Chairman, Medical Benefits Fund of Australia, Limited, and Dr. J. G. Hunter, Medical Secretary. Reference was made to the principal features of the scheme. It was particularly noted that the doctor will retain his professional freedom and that there will be no interference in the doctor-patient relationship.

Department of Medical Sociology and Research.

The department has continued its work of popular education in health and medical subjects.

During the year radio talks were contributed to the Australian Broadcasting Commission's programmes, and material for Press use was prepared on a wide variety of topics.

As previously, assistance has been given to the Australian Broadcasting Commission and the Press in their presentation of medical news and articles.

The Post-Graduate Committee in Medicine.

Representations have been made to the Senate of the University of Sydney that the number of representatives of the Association on the Post-Graduate Committee in Medicine be increased from two to three, one of whom shall be a representative of the Federation of Country Local Associations.

Therapeutic Substances Act.

Representations were made to the New South Wales Government that it give consideration to the introduction of a Therapeutic Substances Act to provide for the regulation of standards, manufacture, *et cetera*, of therapeutic substances. A similar recommendation has been made by the Federal Council of the British Medical Association in Australia to the Commonwealth Government.

Department of Labour and Industry and Social Welfare.

Medical Services to Persons in Receipt of Social Aid.

An agreement was reached between the Council and the Department of Labour and Industry and Social Welfare for the provision of medical services to those in receipt of social aid on a fee for service basis instead of a capitation method of payment as in the past. This scheme came into operation on January 1, 1953.

Payment for the service is made at the same rates as are paid under the Pensioner Medical Service of the Commonwealth Government.

The beneficiaries under this scheme belong to a group in the community who are in need of some form of social aid but are not entitled to pensions of any kind from the Commonwealth Government.

Golf Tournament, 1952.

The annual golf tournament for the British Medical Association Cup, presented by Dr. H. C. Rutherford Darling, was held on the golf course of the Australian Golf Club at Kensington on Tuesday, October 21, 1952. Dr. M. S. Richmond was the winner. Dr. J. M. Nield, Dr. K. H. Hill and Dr. A. K.

Smith tied for second place—Dr. J. M. Nield winning on the count back.

Trophies were presented at the Branch Meeting on November 27, 1952.

British Medical Agency of New South Wales, Limited.

The annual general meeting of the British Medical Agency of New South Wales was held on October 7, 1952. The directors' report for the year ended June 30, 1952, presented by the Chairman, Dr. George Bell, showed a loss, a contributing factor being the increase in expenditure caused by rises in the basic wage and general expenses.

The agency has maintained its services to members of the profession, to whom the directors look for continued support in the future.

Medical Finance, Limited.

The annual meeting of Medical Finance, Limited, was held on October 7, 1952.

The report of the directors, presented by the Chairman, Dr. George Bell, indicated that the profit for the year ended June 30, 1952, was small but showed a slight improvement on the profit for the previous year. The demand for the company's funds during the twelve months was limited by reason of the controlled interest rates.

Premises Revenue Account.

The Premises Revenue Account discloses a net deficit of £953 as against a net deficit of £4095 for the year ended December 31, 1951, thus showing a decrease of £3142 in the net deficit suffered. This decrease is accounted for by a net increase in income of £1757 and a net decrease in expenditure of £1385, as set out in detail in the accompanying comparative statements.

A comparison of percentages of expenditure to rent revenue with those at December 31, 1951, is as follows:

	1951	1952
Percentages of expenses to revenue ..	118·4%	104%
Percentages of surplus to revenue ..	—	—
	118·4%	104%

The percentage of rent revenue, expenses and depreciation and the percentage of net deficit for the year to the capital value of the land and building (British Medical Association House), as shown by the books at December 31, 1952, namely £136,049, with the previous year's percentages in parentheses, are as follows:

Rent Revenue (including amount charged for British Medical Association Branch Offices, *et cetera*)		17·6%	(15·9%)
Sundry Expenses, Interest, and Provision for Painting of Building	16·25%		(16·8%)
Depreciation of Building	2·05%		
		18·3%	(2·0%)
Net deficit for year		·7%	(2·9%)

Financial Statement.

The Council has pleasure in presenting to members the balance sheet and accounts in respect of the financial year which terminated on December 31, 1952.

NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

Balance Sheet as at December 31, 1952.

	£ s. d.	£ s. d.
FIXED LIABILITIES.		
Debentures:		
62—4% Series "A" at £10 each ..	620 0 0	
345—4·65% Series "B" at £50 each	17,250 0 0	
210—4·65% Series "C" at £10 each	2,100 0 0	
	19,970 0 0	
Less Amount Unpaid	54 0 0	
	19,916 0 0	
General Reserve Fund (used in the business)	1,250 0 0	
Australian Mutual Provident Society (secured by mortgage over property, B.M.A. House)	28,000 0 0	
		49,166 0 0
CURRENT LIABILITIES.		
Sundry Creditors	1,920 1 8	
Interest Accrued on Mortgage	99 3 4	
Deposit at Call	700 0 0	
Commercial Banking Company of Sydney Limited—Premises and Branch Current Account Net ..	6,568 4 7	
		9,287 9 7
OTHER CREDIT BALANCES.		
Subscriptions Paid in Advance Suspense	88 13 11	
Provision for Taxation	2,407 5 0	
Provision for Painting of Building ..	2,400 0 0	
Superannuation Fund Reserve Account (as per Contra)	1,272 6 2	
		6,168 5 1
ACCUMULATED FUNDS.		
Balance at December 31, 1951	95,952 0 2	
Add Surplus for year ending December 31, 1952: Branch £1,462 9 8		
Less Deficit: Premises 952 6 8		
	510 3 0	
		96,462 3 2
		£161,083 17 10

	£ s. d.	£ s. d.
FIXED ASSETS.		
Land and Buildings, British Medical Association House—at Cost *less* Depreciation on Building ..	136,048 11 3	
Library—at Cost *less* Depreciation	5,792 3 1	
Office Furniture and Equipment—at Cost *less* Depreciation	1,905 15 4	
Debentures in other Companies—Australasian Medical Publishing Company Limited (Face Value)	6,100 0 0	
Deposit on Debentures—Australasian Medical Publishing Company Limited	56 16 4	
Commonwealth Treasury Bonds (Face Value)	7,000 0 0	
		156,903 6 0
FLOATING ASSETS.		
Sundry Debtors (after making provision for doubtful debts)—Sundry Tenants, Rent *et cetera*	1,954 2 10	
Cash on Hand	29 15 9	
		1,983 18 7
OTHER DEBIT BALANCES.		
Prepaid Insurances, Rates *et cetera*		924 7 1
Superannuation Fund — Investment Account (as *per contra*)		1,272 6 2
		£161,083 17 10

Sydney, February 16, 1953.

R. H. MACDONALD, President.
GEORGE BELL, Hon. Treasurer.
G. D. ALEXANDER, Accountant.

We have examined the foregoing Balance Sheet with the Books of Account of the New South Wales Branch of the British Medical Association, and, having obtained all the information and explanations we have required, we are of the opinion that such Balance Sheet is properly drawn up so as to exhibit a true and correct view of the state of the Company's affairs according to the best of our information and the explanations given to us and as shown by the Books of the Company. In our opinion the Register of Members and other records which the Company is required to keep by the New South Wales Companies Act, 1936, or by its Articles, have been properly kept.

Sydney.

F. W. DUESBURY & Co.,
Chartered Accountants (Aust.).

NEW SOUTH WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

BRANCH ACCOUNT.

Income and Expenditure Account for the Year Ended December 31, 1952.

	£ s. d.	£ s. d.
To Salaries	8,482 9 5	
„ Rent—Offices *et cetera*	1,100 0 0	
„ Printing and Stationery	1,167 8 7	
„ Stamps and Telegrams	875 4 7	
„ Telephones	264 12 5	
„ Travelling Expenses—		
Miss Cameron and Miss Rolleston	1,840 9 6	
General	657 0 3	
„ Code Address	3 5 6	
„ Insurance	47 7 11	
„ Exchange and Bank Charges	10 11 11	
„ Refreshments—Meetings	23 18 1	
„ Newspapers	11 9 8	
„ Sundry Petty Expenses	53 13 0	
„ Tea Money	103 4 9	
„ Federal Council	3,352 13 0	
„ Legal Expenses	25 18 0	
„ Repairs to Furniture and Equipment	32 0 9	
„ Pay Roll Tax	200 8 7	
„ Medical Benefits Fund—Staff	15 4 3	
„ Staff Superannuation Fund	465 4 3	
„ Incidental, Travelling and Entertaining Expenses	324 0 0	
„ Cover Presidential Chair	13 12 6	
„ Bank Interest	37 17 3	
„ Maintenance and Alterations—Inter-Office Telephones	13 2 7	
„ Stamp Duty	22 6 6	
„ Golf Trophy	10 5 0	
„ Expenses Dental Association Cricket Match	6 15 0	
		19,160 3 3
„ Depreciation—		
Library	483 12 4	
Office Furniture and Equipment	163 13 6	
		647 5 10
„ Balance, being Surplus for the year ending December 31, 1952, transferred to Accumulated Funds Account		1,462 9 8
		£21,269 18 9

	£ s. d.	£ s. d.
By Subscription Revenue		27,124 17 2
Less Proportion due to—		
British Medical Association	4,348 14 8	
THE MEDICAL JOURNAL OF AUSTRALIA	2,504 2 6	
		6,852 17 2
		20,272 0 0
„ Interest	410 9 3	
„ Rent—Assembly Hall	416 6 6	
„ Broadcasting Fees	81 18 0	
„ Refund Expenses, Federal Council	89 5 0	
		997 18 9
		£21,269 18 9

The net surplus of revenue over expenditure for the year amounted to £510 3s. after making provision for all known expenditure.

The sum of £3,461 9s. 10d. has been written off for depreciation of the building (British Medical Association House), plant, office furniture and equipment, and the library.

The sum of £800 has been provided out of the current year's revenue to create a reserve for painting the exterior of the building. This amount for the time being is used in the business of the Association.

R. H. MACDONALD,
President.

The balance sheet of the Branch and the income and expenditure account of the Branch and of the premises were received and adopted on the motion of Dr. George Bell, seconded by Dr. W. F. Simmons.

ELECTION OF OFFICE BEARERS.

Dr. R. H. Macdonald announced that the following had been elected members of the Council for the ensuing year.

Elected as Representing the General Body of Members.—Dr. M. S. Alexander, Dr. George Bell, Sir Charles Blackburn, Dr. B. D. Edye, Dr. H. R. R. Grieve, Dr. G. C. Halliday, Dr. A. S. Johnson, Dr. A. W. Morrow, Dr. T. Y. Nelson, Dr. K. C. T. Rawle, Dr. W. F. Simmons, Dr. F. T. M. Solling, Dr. E. S. Stuckey, Dr. A. C. Thomas, Dr. E. F. Thomson, Dr. H. I. Turnbull.

Elected as Representing Women Members.—Dr. Phyllis M. Anderson.

Elected as Representing the Public (Government) Medical Services.—Dr. H. H. Willis.

Elected as Representing Country Local Associations.—Dr. J. M. Dowling.

Elected as Representing Metropolitan Local Associations.—Dr. G. F. Elliott, Dr. K. S. Jones.

Messrs. F. W. Duesbury and Company were appointed auditors for the ensuing year.

ELECTION OF REPRESENTATIVE OF THE BRANCH AT THE ANNUAL REPRESENTATIVE MEETING OF THE BRITISH MEDICAL ASSOCIATION, 1953, CARDIFF.

On the motion of Dr. E. F. Thomson, seconded by Dr. A. W. Morrow, Dr. E. A. Tivey was appointed the representative of the New South Wales Branch to attend the Annual Representative Meeting of the British Medical Association (1953) to be held in Cardiff, and that Dr. R. A. Money should be appointed deputy representative. The Medical Secretary said that there was some doubt about Dr. Money's ability to attend the meeting. It was resolved that this necessary appointment of a deputy representative should be left in the hands of the Council.

ELECTION OF DELEGATES TO ATTEND THE ANNUAL MEETING (JULY 13 TO 17, 1953) OF THE BRITISH MEDICAL ASSOCIATION, CARDIFF.

It was resolved on the motion of Dr. E. F. Thomson, seconded by Dr. A. W. Morrow, that Dr. E. A. Tivey and a second delegate to be chosen by the Council should be appointed delegates to attend the annual meeting of the British Medical Association (1953) to be held in Cardiff.

INCOMING PRESIDENT'S ADDRESS.

Dr. A. J. Murray delivered his incoming president's address (see page 609). A vote of thanks to Dr. Murray for his address was carried on the motion of Dr. M. S. Alexander, seconded by Dr. B. T. Edye.

INDUCTION OF PRESIDENT.

Dr. R. H. Macdonald inducted the president for the year 1953-1954, Dr. A. J. Murray. Dr. Murray thanked the members for his election.

VICTORIAN BRANCH NEWS.

Section of Preventive Medicine.

A MEETING of the Section of Preventive Medicine of the Victorian Branch of the British Medical Association will be

held in the Medical Society Hall, 426 Albert Street, East Melbourne, on Thursday, May 14, 1953, at 4.30 p.m. Dr. Brian Clarehan, Medical Superintendent of Heatherton Sanatorium, who has recently returned to Australia after studying the prevention and treatment of tuberculosis overseas, will give an address entitled "Some Observations of Preventive Medicine". All members of the Branch are invited to be present.

Out of the Past.

In this column will be published from time to time extracts, taken from medical journals, newspapers, official and historical records, diaries and so on, dealing with events connected with the early medical history of Australia.

TESTIMONIAL TO PROFESSOR HALFORD.[1]

[*The Australian Medical Gazette*, December 30, 1869.]

WHILE congratulating Professor Halford's friends on their discretion in hesitating to base his claim to a testimonial on the alleged discovery of an antidote to snake-poison, which he now repudiates, at the same time we are at a loss to account for their determination to compliment him on the supposed discovery of a remedy for blood poisoning by venous injection. If it be premature and absurd to present the Professor with a testimonial for the alleged antidotal virtues of ammoniacal injection in snake poisoning, it would be not merely absurd, but still more ridiculous, to do so for his proposal to treat blood poisoning in general by venous injection. So far from the treatment of disease by injection of remedies into the veins being "entirely new" as alleged, it will be seen from an extract from Pereira's magnificent work on materia medica in another column that venous injection was practised so far back as two centuries ago. It is really lamentable to find gentlemen intimately connected with the Melbourne University so deficient in the literature of their profession. Whether the injection of ammonia into the veins in cases of snake bite is likely to be of any service still remains to be proved; but we are wholly unaware of any facts tending to show the value of this plan in the case of blood poisoning. It is to be feared that the hankering after notoriety so general in these days of sensation and fastness frequently occasions the unphilosophic error of drawing deductions from a small number of cases the circumstances of which are often imperfectly understood and as inaccurately reported. We wonder what next.

Correspondence.

LEPROSY AT NAURU.

SIR: There has come to my attention an editorial note in your issue of November 22, 1952, dealing with the article by Wade and Ledowsky on the remarkable leprosy epidemic at Nauru, published last year in the *International Journal of Leprosy* (20 (1952): 1-29), and also to a letter referring to that article from Brian Freeston, Secretary-General of the South Pacific Commission, which appeared in your issue of January 31, 1953.

Regarding the former note, there are one or two points to which I would like to call attention, besides the obvious typographical error which gives 1929 instead of 1920 as the year of the disastrous influenza epidemic at Nauru. Also besides the statement that the phosphate-rock terrain made for difficulties in maintaining hygiene, the fact being that that central, elevated part of the island is uninhabited, the population being entirely on the low-level margin bordering the sea except for a relatively small number around the land-locked, sea-level Buada Lagoon.

The figure of 35% of the Nauruan population affected up to 1929 does not in actuality apply to the number who "had demonstrable leprosy", but—to quote from the article—to those who "had been diagnosed as showing manifestations of leprosy". There is a real difference, for there were included in the statistics many individuals who had only suspicious skin lesions, but were dealt with as if actually leprous because of the seriousness of the situation. However, even making allowance on that account, the effective infection rate was beyond question extraordinarily high.

This leads to the conclusion that the people were in actuality highly susceptible to infection—not that that would only seem to be the case, as is suggested by your statement on that point, or that that conclusion is negatived by the fact that at least 90% of the cases were of the maculo-anæsthetic type. The principal finding of our review was that, in spite of the high susceptibility to infection, the people had a peculiar, innate resistance to progression of the disease, shown both by the prevailing type and also by the unusually good response to chaulmoogra treatment. It is the accepted belief that, ordinarily, when leprosy is introduced into virgin territory the malign lepromatous type predominates for some time, and the experience of clinicians in many places during the chaulmoogra era was that maculo-anæsthetic cases responded poorly to that medicament. For these reasons we quoted the conclusion of Lurie drawn from certain especially significant animal experiments: "Resistance to infection . . . is distinct from resistance to the progress of an already engrafted disease." This is an important biological condition which seems to be particularly clearly exemplified by the experience at Nauru.

It will be understood that in ordinary experience many cases which are simple macular in the early stage—the "indeterminate" form of present-day classification, from the South American scheme—evolve to lepromatous. Apparently very few did so in the Nauru epidemic.

As for the letter referred to, it complains that in our article, and consequently in your editorial, the recent survey visit to Nauru of Dr. C. J. Austin, of Fiji, is credited to the South Pacific Health Service, whereas it was actually under the auspices of the South Pacific Commission. The error, quite inadvertent, is mine. Checking back, I find that in the letter with which Dr. Austin sent me a copy of his report he spoke only of the latter organization. However, the report itself, some of the data of which we used, was addressed to the Inspector-General, South Pacific Health Service in Suva.

Yours, etc.,

H. W. WADE, M.D.,
Associate Medical Director,
Leonard Wood Memorial.

Culion Sanitarium,
Palawan,
Philippines.
March 25, 1953.

PROLONGED LOCAL ANÆSTHESIA IN OPERATION WOUNDS.

SIR: Published in the journal of March 14, 1953, was a letter by Mr. Kenneth W. Starr on this subject.

At this time, I was preparing to write you after carrying out a series of tests with a product prepared in Melbourne by "Hermette", which will be marketed before the end of March as "Staycaine". The claims of the preparation for "prolonged local anæsthesia" are completely supported.

Amongst the series of operations, tests included injecting one side at the operation for double hernia, and at the operation for ligature of long saphenous veins in groin. In this type of test, the patient volunteered the information that one side was painful, whilst the other (the side injected) was not painful—they were only conscious of the wound.

In operations about the anus, I had one patient with a fissure; she had been operated upon for the same condition within the year. She was classically of the apprehensive type, and her comments on the contrast of the post-operative period were most glowing.

The comments of the nursing staff at one hospital where I performed a cholecystectomy on a doctor's mother-in-law illustrated a most important benefit. Sister commented upon the fact that in contrast with the need for morphine or its equivalent six-hourly for the first forty-eight hours after operation in ordinary circumstances, this patient received only two injections in that time, one each night; and apart from that, the patient was at ease, coughed without discomfort, and looked so well.

The injections I have given have been into the subcutaneous tissues, and into the muscle wall where indicated, to form a barrier between the wound and its nerve supply. At the site of each needle puncture, I have given less than half a cubic centimetre, and have formed the barrier by multiple needle puncture, thus avoiding a "pool" of material.

[1] From the original in the Mitchell Library, Sydney.

The most I have given to any patient has been 10 cubic centimetres. In the early stages I was cautious in the amount of preparation to give, but I have had no complications as the result of its use, and feel larger quantities can be used without fear of impeded wound-healing, local infection *et cetera*.

I have not yet injected the preparation into a joint for pain of a gross osteoarthritis, but from my present observation, I would suggest there will be no damage to joint tissue, and it will be of value in the treatment of this condition.

Yours, etc.,

61 Collins Street, DOUGLAS DONALD.
Melbourne,
March 30, 1953.

MASS RADIOGRAPHY SURVEY.

SIR: The Anti-Tuberculosis Association of New South Wales will begin a mass radiography survey in the city of Sydney on April 30, 1953, commencing with the wards, Flinders, Paddington, Redfern and Alexandria. Four mobile units will be operating daily from 10 a.m. to 4 p.m. and from 5 p.m. to 8 p.m. Attendance will be voluntary for the first week and compulsory for the second week in each ward. The Government will proclaim compulsory X rays in each ward as from the beginning of the second week. Later this will be extended to the remaining wards of the city of Sydney. This survey is one of the first on such a large scale. The full cooperation of the medical profession will assure its success.

The New Research and Diagnostic Clinic, cnr. Crown and Foveaux Streets, Surry Hills, opened recently by the Anti-Tuberculosis Association of New South Wales, has a static mass radiography unit and also two other X-ray plants and will remain at the disposal of the medical profession as in the past.

Yours, etc.,

C. RUBINSTEIN,
Medical Director, Mass Radiography Division.
Anti-Tuberculosis Association of New South Wales,
Cnr. Crown and Foveaux Streets,
Surry Hills,
New South Wales.
April 17, 1953.

IMPRESSIONS OF MEDICAL SCIENCE IN THE UNITED KINGDOM.

SIR: Some eighteen months ago I travelled from Brisbane to the United Kingdom in order to obtain post-graduate experience in pathology and have considered myself very fortunate to have had the opportunity of coming into touch with workers in all fields of pathology. One is impressed by the intense interest of almost everyone engaged in the work even down to the junior laboratory technician, provided they are given the opportunity of improving their knowledge. The junior member always seems keen to help in a different branch from their own, time permitting.

The ultimate cause perhaps is the competition, but I do not consider this the whole story. Equally as important is the desire of the individual to acquire new knowledge. I do not imply that workers in Australia are not equally keen, but it seems more in evidence over here.

The senior members pride themselves on keeping abreast of current medical thought, and if possible are ready and willing to advance and investigate any theory that might occur to them or to try and reproduce current work in a field in which they have a particular interest. There are, of course, many workers in pure research.

This thirst for knowledge is apart from any monetary reward and is a very desirable thing, and in my opinion one of the reasons why Britain is in the front rank of medical science. Also very evident is the enthusiasm with which medical meetings are arranged and attended for the purpose of the exchange of new ideas.

The newest studies such as flame photometry, chromatography, cardiac catheterization and blood gas analysis, metabolic studies with radioactive substances, trial of new antibiotics, phase contrast microscopy and many others find workers in many parts of the country not only interested in but actually engaged, officially or unofficially, in experimentation with these new aids to knowledge.

Particularly valuable is the way the Medical Research Council works in arriving at an assessment of the efficacy or otherwise of a particular treatment and the reaction of patients to such treatment. I have in mind, particularly, the Medical Research Council trials going on in the group laboratories throughout the country, such as the determination of streptomycin sensitivity and resistance and isonicotinic acid hydrazide sensitivity and resistance in connexion with tuberculosis treatment.

One wonders what the future has in store. The Government Medical Service seems to be working reasonably well, although there are some anomalies not the least of which is the lack of beds. The present Government decided to charge one shilling for each prescription with the idea of trying to reduce the total expenditure on prescriptions, but instead of reducing it the cost has increased. What is the ultimate outcome? Is the cost going to snowball each year until finally the cost of the whole service becomes so great as to seriously affect the economy of the nation?

Placing a stop on expenditure will not necessarily improve matters such as the need for more beds. Whatever the outcome it is clear that any shortcomings of the Medical Service will not be due in any respect to the individual workers in medicine.

Yours, etc.,

Group Pathological Laboratory, JOHN SQUIRES.
Lakin Road,
Warwick,
Warwickshire, England.
April 9, 1953.

A PROTEST.

SIR: May I again raise my voice in protest on behalf of the long-suffering readers of your journal? Your recent article, published with some prominence, on "A Genetical Survey in Chenchu, South India", demonstrates very well how unsuitable is much of the matter that you publish, and for which I, and all the other compulsory subscribers, have to pay. Of what value or interest are the blood groups of an Indian tribe to Australian practitioners of medicine? If this analysis of 108 blood samples sent from India has any scientific value, then surely it should be reported in one of the special journals of experimental medicine or pathology, and not in a clinical journal.

In view of the large number of other unsuitable articles published, may I inquire: (*a*) Has the Editor discretionary power to reject articles submitted? If so, (*b*) is this power being used?

If the Editor has no choice in the selection of his copy, then it would seem that this would be a complaint to be referred to the British Medical Association Branch Councils, who represent the compulsory subscribers.

However, I suppose little will ever be done to raise the standards of THE MEDICAL JOURNAL OF AUSTRALIA. Masses of irrelevant articles will still be poured forth; occasional significant articles (like the report of the New South Wales Committee on Maternal Mortality, in the same issue of April 11) will still be pushed to the back pages; and illustrations will continue to fall out, as if no printer had ever devised a method for sticking them in. With these few remarks of complaint, I remain,

Yours, etc.,

12 Collins Street, DAVID B. PITT.
Melbourne,
April 13, 1953.

[The Editor has discretionary power to reject articles. This power is being used.—EDITOR.]

THE TREATMENT OF PEPTIC ULCER.

SIR: I was interested to read the two articles covering the treatment of peptic ulcer (M. J. AUSTRALIA, February 28, 1953), but thought the article emanating from the "Unit of Clinical Investigation", Royal North Shore Hospital of Sydney, failed to match in substance the imposing title given to its point of origin. One would expect that a "Unit of Clinical Investigation" would have abandoned such catholic terms as "ulcer patients" and the statement that "only one in six ulcer patients come to surgery" indicates a restricted approach to peptic ulceration in its various

situations. Though gastric and duodenal ulceration are similar in their pathology, and one uses identical ancillary aids in establishing diagnosis, clinically and surgically they produce two very different problems. As Dr. Goulston pointed out, there is an increasing school of thought that they may be distinct even with regard to their ætiology.

At present surgery is more often indicated in the treatment of peptic ulceration of the stomach than of the duodenum. Amongst the reasons for this is that medical treatment has not such a sound rationale when ulceration occurs in the stomach. Added to this there are the following operative considerations which favour surgery for gastric ulceration. Firstly, duodenal closure is relatively simple, removing one of the most difficult and troublesome problems confronting a "gastrectomist". Secondly (and unless the ulcer is high on the lesser curve), one is not forced to do a high resection, for anastomotic ulcer is practically unknown, and one is not performing a physiological operation to reduce gastric secretion. Thirdly, one may, if he so desires, do a physiological operation of the Billroth I type, an operation which some claim reduces the incidence of post-gastrectomy symptoms. Finally the problem of peptic ulceration of the stomach cannot be disassociated from that of neoplastic ulceration with its appalling prognosis. One knows that a certain percentage of peptic ulcers become malignant, and a slightly higher percentage of gastric carcinomata arise in preexisting peptic ulcers. Also it is thought that the carcinogenic change in the cells of the gastric mucosa may predispose them to peptic ulceration, so making the early differentiation more difficult. Apart from these considerations, and no matter what the clinic, there is a human diagnostic error in distinguishing between the two forms of ulceration in its early stages. Further, it has been shown that with perforated gastric ulcers, when the surgeon has seen and felt the ulcer and thought it to be simple, a not inconsiderable proportion turn out to be malignant.

For all these reasons surgery is strongly indicated in a high proportion of chronic gastric ulcer. One finds that it is not uncommon for surgeons and clinics to report an "operability rate" of some 40% to 60% for gastric ulcers. The percentage treated surgically is increasing as confidence is being gained in the reduced mortality of gastrectomy and the minimal post-operative morbidity.

Duodenal ulceration on the other hand presents a very different problem, not only surgically but in its social and economic implications. It is a much more common lesion, occurring in a younger age group, and affecting principally males of different social strata than that seen in gastric ulcer, and there are additional "personality associations" to be dealt with. Whether the associated changes in gastric secretion are the ætiological factors concerned in the production of duodenal ulceration or whether they occur secondarily to the ulceration and so delay its healing, the rationale of medical treatment is more clearly defined for this disease entity. However, the fact that so many forms of surgical treatment have been tried, and that there are several still in the experimental stages, is a clear indication that medical treatment has its limitations, and there is a definite place for surgery in the management of this disease.

The percentage of duodenal ulcers treated surgically is small. Reported series indicate that it is somewhere in the vicinity of 10% to 15%. One wonders what this figure is in our hospitals. The bad results of the "gastro-enterostomy era" and the higher mortality of subtotal gastrectomy in the not so far distant past, still prejudice a proportion of our profession against surgery, and only some dire complication forces them to seek surgical aid. Combined with this the accepted indications for operation are the same now as they were twenty years ago; a fact mentioned by Dr. Goulston in his article and completely endorsed by Mr. Rundle.

Should operation then be reserved for those exsanguinated by repeated hæmorrhages, malnourished by an established pyloric stenosis, or those whose business or family life has been so disrupted that surgery has become a desperate last resort? Or is it not time that the accepted indications for operation were completely scrutinized to see if surgery could play a more active part a little earlier in the management of this disease? One feels that with the improvement in the mortality and morbidity of accepted surgical procedures it is time an attempt was made to analyse recurrent duodenal ulcers more critically, and one should make every effort to prevent the onset of serious complications rather than wait for their arrival.

The place of surgery in this disease lends itself completely to a "Unit of Clinical Investigation"—something so rare in this city of ours. For this reason one finds it disappointing that an article coming from a unit with these unique facilities should just reiterate the shortcomings and limitations of the past.

In considering surgery in the treatment of peptic ulcer it is time to give up the concept of "ulcer patients" and consider individually peptic ulceration in its various situations. As I have briefly attempted to indicate, the role of surgery in peptic ulceration of the stomach is well defined, and one should advise surgical treatment in a high percentage of cases. The "duodenal ulcer" must still earn his operation, but let him not pay too high a price. Let us hope that some day a clinical survey backed by confidence in one's surgical procedures, and correlated with operative mortality and morbidity, will give us something more than the old catechism of "hæmorrhage, perforation, penetration and stenosis" in selecting those cases who will be benefited by surgery. Much could be done in a "Unit of Clinical Investigation".

Yours, etc.,

217 Macquarie Street, R. P. MELVILLE.
Sydney,
April 16, 1953.

Medical Practice.

THE COLLEGE OF GENERAL PRACTITIONERS.

A COMMUNICATION has been received from the College of General Practitioners, 14 Black Friars Lane, Queen Victoria Street, London, E.C.4, enclosing copies of provisional by-laws adopted on November 19, 1952. They are published at the request of the College.

1. In these by-laws:

(A) (i) "General practice" means general medical practice as a principal or as a qualified assistant or *locum tenens* of any such person or as an employed general medical officer (whether in H.M. Forces or otherwise). (ii) In computing the period for which any person has been engaged in general practice there shall be excluded any period during which the person concerned was not a registered medical practitioner except in so far as the Council may think fit to permit the inclusion of general practice in some country overseas while a qualified medical practitioner according to the laws of that country.

(B) A "registered medical practitioner" means a person holding a medical qualification which has been registered with the General Medical Council or with the equivalent organization of a country or State within the British Commonwealth of Nations and the Republic of Eire.

(C) "Approved post-graduate instruction" means post-graduate medical instruction provided by or under the ægis of any university in the United Kingdom or the Republic of Ireland or any other institution approved by the Council for the purpose (either generally or in relation to any particular course of instruction).

(D) "Approved higher medical degree or diploma" means any higher post-graduate medical degree or diploma granted in the United Kingdom or the Republic of Ireland and such other higher post-graduate medical degrees or diplomas as may from time to time be approved by the Council.

2. A person shall be qualified for admission to membership of the College if he complies with the following conditions:

(A) He is a registered medical practitioner; and

(B) (i) He has been engaged in general practice for not less than 20 years in total; or (ii) He has been engaged in general practice for not less than 5 years in total and has in his application for membership undertaken to arrange to receive approved post-graduate instruction for not less than 3 days (or the equivalent as approved by the Council) in each year, or 5½ days (or the equivalent as approved by the Council) in each alternate year, during his membership or until he shall have been engaged in general practice for not less than 20 years in total or shall have become the holder of an approved higher medical degree or diploma; or (iii) He has been engaged in general practice for not less than 5 years in total and is the holder of an approved higher medical degree or diploma.

3. A person shall be qualified for admission as an associate if he complies with the following conditions:

(A) He is a registered medical practitioner; and

(B) He is or contemplates being engaged in general practice but has not been engaged in general practice for 5 years or more in total.

4. An associate shall be entitled to receive all notices sent by the College to its members generally and to attend at any General Meeting and generally to participate in the activities of the College, but he shall not rank as a member of the College and shall not be entitled to vote at any General Meeting.

5. A person applying for admission as a member or as an associate shall complete, sign and deliver to the Secretary an application in writing in such form as the Council may from time to time prescribe or accept. The Council shall have an absolute discretion in determining whether to accept or reject any such application and shall not be bound to assign any reason for rejection.

6. An entrance fee of 10 guineas shall be payable upon admission as a member and an entrance fee of 1 guinea shall be payable upon admission as an associate. Upon an associate being admitted as a member credit shall be given for the entrance fee paid upon admission as an associate in computing the entrance fee payable by him upon admission as a member.

7. These by-laws are provisional and shall remain in force only until the Annual General Meeting in the year 1953. In the by-laws to be presented for confirmation at that meeting the Council propose to make provision for credit for fees paid hereunder.

Naval, Military and Air Force.

APPOINTMENTS.

THE undermentioned appointments, changes *et cetera* have been promulgated in the *Commonwealth of Australia Gazette*, Number 13, of March 5, 1953.

AUSTRALIAN MILITARY FORCES.

The following changes are made in connexion with the Australian Military Forces:

Colonel J. G. G. White, O.B.E., E.D., Royal Australian Army Medical Corps, is appointed Honorary Physician to His Excellency the Governor-General of Australia, *vice* Colonel J. G. Hayden, C.B.E., E.D., Royal Australian Army Medical Corps, 1st February, 1953.

Colonel J. M. Dwyer, E.D., Royal Australian Army Medical Corps, is appointed Honorary Surgeon to His Excellency the Governor-General of Australia, *vice* Lieutenant-Colonel (Temporary Colonel) R. Officer, Royal Australian Army Medical Corps, 1st February, 1953.—(Ex. Min. No. 48—Approved 27th February, 1953.)

Australian Regular Army.

Royal Australian Army Medical Corps.

The Short Service Commission of 3/40095 Captain I. A. L. Ferguson is extended to 15th January, 1953.

3/40095 Captain I. A. L. Ferguson is transferred to the Reserve of Officers (Royal Australian Army Medical Corps (Medical)) (3rd Military District), 16th January, 1953.—(Ex. Min. No. 40—Approved 27th February, 1953.)

The Short Service Commission of 2/40112 Captain M. J. Deakin is extended until 9th January, 1953.

2/40112 Captain M. J. Deakin is transferred to the Reserve of Officers (Royal Australian Army Medical Corps (Medical)) (3rd Military District), 10th January, 1953.—(Ex. Min. No. 41—Approved 27th February, 1953.)

Regular Army Special Reserve.

Royal Australian Army Medical Corps.

VX700325 Major (Honorary Lieutenant-Colonel) K. J. J. Dorney, D.S.O., is transferred from the Citizen Military Forces, 29th January, 1953.

Citizen Military Forces.

Northern Command: First Military District.

Royal Australian Army Medical Corps (Medical).—1/61806 Lieutenant-Colonel M. R. Gold is appointed to command 9th Field Ambulance, 17th January, 1953. 1/61767 Lieutenant-Colonel K. J. J. Dorney, D.S.O., relinquishes command 9th Field Ambulance, 16th January, 1953, is transferred to the Regular Army Special Reserve, and to be Major and Honorary Lieutenant-Colonel, 29th January, 1953. 1/61806 Lieutenant-Colonel M. R. Gold is absorbed in a vacancy in the authorized establishment of Lieutenant-Colonels, and to receive pay and allowances of that rank, 17th January, 1953. 1/39140 Captain J. G. P. Ryan is transferred to the Reserve of Officers (Royal Australian Army Medical Corps (Medical)) (1st Military District), 19th December, 1952. To be Lieutenant-Colonel, 7th February, 1953: 1/43724 Major (Temporary Lieutenant-Colonel) G. B. V. Murphy.

Eastern Command: Second Military District.

Royal Australian Army Medical Corps (Medical).—To be Colonel, 7th February, 1953: 2/50455 Lieutenant-Colonel (Temporary Colonel) A. E. McGuinness, M.C. To be Temporary Major, 28th January, 1953: 2/100752 Captain R. D. Rothfield.

Southern Command: Third Military District.

Royal Australian Army Medical Corps (Medical).—3/73792 Captain R. W. Webster is transferred to the Reserve of Officers (Royal Australian Army Medical Corps (Medical)) (3rd Military District), 5th December, 1952. To be Captain (provisionally), 28th January, 1953: 3/152003 Norman Boyce Le Couteur.

Central Command: Fourth Military District.

Royal Australian Army Medical Corps (Medical).—4/35233 Major J. D. Rice is appointed to command 1st Casualty Clearing Station, and to be Lieutenant-Colonel (provisionally), 1st December, 1952. 4/32034 Honorary Captain R. C. McKinnon is appointed from the Reserve of Officers, and to be Captain (provisionally), 16th January, 1953.

Reserve Citizen Military Forces.

Royal Australian Army Medical Corps.

2nd Military District.—Honorary Captain G. A. Cutler is retired, 16th December, 1952.

ROYAL AUSTRALIAN AIR FORCE.

Permanent Air Force.

Medical Branch.

The following officer is granted acting rank as indicated, 19th February, 1953: (Squadron Leader) Flight Lieutenant D. B. Heylan (023063).

The following appointments, promotions *et cetera* are promulgated in the *Commonwealth of Australia Gazettes*, Numbers 15 and 17, of March 12 and 19, 1953.

NAVAL FORCES OF THE COMMONWEALTH.

Permanent Naval Forces of the Commonwealth

(Sea-Going Forces).

Termination of Appointment.—The appointment of Patrick Denis Delany as Surgeon Lieutenant (for Short Service) is terminated, dated 31st January, 1953.

Citizen Naval Forces of the Commonwealth.

Royal Australian Naval Volunteer Reserve.

Resignation.—The resignation of John Hamilton Stace of his appointment as Surgeon Lieutenant-Commander is accepted, dated 30th December, 1952.

ROYAL AUSTRALIAN AIR FORCE.

Permanent Air Force.

Medical Branch.

The probationary appointment of the following officers is confirmed: Flight Lieutenants T. C. Wall (035953), J. L. Struan-Marshall (035910) (Acting Squadron Leader), T. J. Orr (024805); Flying Officer R. V. Eedy (016225).

The probationary appointment of the following Flight Lieutenants is confirmed: T. F. Sandeman (035954), R. H. B. Sacks (036080), P. A. O'Brien (035952), A. E. Daley (036121), J. Q. McCubbin (036120), G. U. Taylor (036124).

The resignation of the following officers is accepted: Flight Lieutenants B. O. Pierce (036123), 19th December, 1952;

A. E. Daley (036121), 31st December, 1952; Flying Officer R. V. Eedy (016225), 27th January, 1953.

Active Citizen Air Force.

Medical Branch.

No. 23 (City of Brisbane) Squadron.—Flight Lieutenant J. T. Duhig (015104) is transferred to the Reserve, 2nd December, 1952.

Obituary.

WILLIAM FRANCIS HERLIHY.

DR. B. D. WYKE has sent the following appreciation of the late Dr. William Francis Herlihy.

The sudden death of Bill Herlihy has removed from Australian surgery one of the most promising of its younger pupils, a most charming colleague, and a man of firm determination and deep loyalty to his ideals.

Early in his career Bill Herlihy had decided what his professional goal should be, and with estimable skill and tenacity he set out to achieve his objects. He was one of the few who subscribe in practice to the belief that basic scientific research is the keystone of modern surgical progress; and with this in mind he very early began a series of detailed studies of comparative osteology in the department of anatomy in the University of Sydney. In carrying out this work he displayed a remarkable attention to detail and a breadth of intellectual vision which soon marked him out among those who knew him well as a man of outstanding promise.

Apart from his unusual professional qualifications, Bill Herlihy endeared himself to his colleagues by his unassuming modesty and by his unswerving loyalty to those ideals and principles which he had early decided should guide his career. His capacity for work was prodigious, and he frequently astonished those of us who worked with him by the intensity of his daily activities.

Having rapidly laid the firm foundations of what promised to be a brilliant surgical career, Bill Herlihy came to England and, after securing his M.D. and F.R.C.S. in rapid succession, began to graft on to his academic foundation the clinical superstructure to the erection of which he proposed to devote the rest of his working life. In this he was being remarkably successful, and had already established himself in England as a man of considerable clinical competence as well as of sound scientific background.

Those of us who were his close friends cannot yet realize that he has gone; but his memory will always serve as an inspiration to those young surgeons, few as they are, who really believe that the future progress of surgery, especially in Australia, will depend upon the combination of a first-rate clinical training with a sound practical knowledge of the basic sciences of medicine.

Australian Medical Board Proceedings.

NEW SOUTH WALES.

THE following have been registered, pursuant to the provisions of the *Medical Practitioners Act*, 1938-1950, as duly qualified medical practitioners: Roberts, Ivor Charles, M.B., B.S., 1952 (Univ. Adelaide); Gilchrist, Marjorie, M.B., B.S., 1936 (Univ. Melbourne), D.P.M. (Univ. Melbourne), 1948; Atkinson, William Reginald, M.B., B.S., 1949 (Univ. Melbourne); Green, Owen Howard, M.B., B.S., 1950 (Univ. Queensland); Stoll, Basil Arnold, L.R.C.P. (London), 1939, M.R.C.S. (England), 1939; Savage, Stanley Thompson, M.B., B.Ch., 1951 (Queen's University, Belfast); Bloch, Bernard, M.B., Ch.B., 1945 (Univ. Witwatersrand), F.R.C.S. (England), 1952; Magarey, Frank Rees, M.B., B.S., 1935, M.D., 1941 (Univ. Adelaide), M.R.C.P. (London), 1938, M.R.A.C.P., 1944; Kerr, Charles Somerville, M.B., Ch.B., 1925 (Univ. Glasgow).

The following additional qualifications have been registered: Wiles, Ronald Booth (M.B., B.S., 1942, Univ. Sydney), M.S., 1953 (Univ. Sydney); Campbell, Colin Alexander Kemp (M.B., B.S., 1946, Univ. Sydney), Dip. Ophth. (Univ.

DISEASES NOTIFIED IN EACH STATE AND TERRITORY OF AUSTRALIA FOR THE WEEK ENDED MARCH 28, 1953.[1]

Disease.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Northern Territory.	Australian Capital Territory.	Australia.
Acute Rheumatism	2(2)	1(1)	..	..	..	..	..	..	3
Amœbiasis	..	..	..	..	..	..	..	..	..
Ancylostomiasis	..	..	..	..	..	..	..	..	..
Anthrax	..	..	..	..	..	..	..	..	..
Bilharziasis	..	..	..	..	..	..	..	..	..
Brucellosis	1	1(1)	..	..	..	..	..	..	2
Cholera	..	..	..	..	..	..	..	..	..
Chorea (St. Vitus)	..	..	..	..	..	..	..	..	..
Dengue	..	..	..	..	..	..	..	..	..
Diarrhœa (Infantile)	7(6)	1(1)	2(1)	..	..	2(1)	..	..	12
Diphtheria	22(11)	21(16)	8(6)	..	5(5)	..	..	..	56
Dysentery (Bacillary)	..	2(1)	..	5(5)	..	..	..	..	7
Encephalitis	..	1(1)	..	..	..	..	..	..	1
Filariasis	..	..	..	..	..	..	..	..	..
Homologous Serum Jaundice	..	..	..	..	..	..	..	..	..
Hydatid	..	..	..	..	..	..	..	..	..
Infective Hepatitis	..	9(4)	..	..	11(9)	..	..	..	20
Lead Poisoning	..	..	4	..	..	..	..	..	4
Leprosy	..	..	..	..	..	..	..	..	..
Leptospirosis	..	..	11	..	..	..	..	..	11
Malaria	..	..	..	..	..	..	..	..	..
Meningococcal Infection	4(3)	4(2)	2(2)	..	..	1	..	..	11
Ophthalmia	..	..	..	..	2	..	..	..	2
Ornithosis	..	..	..	..	..	..	..	..	..
Paratyphoid	1	..	..	..	..	..	..	..	1
Plague	..	..	..	..	..	..	..	..	..
Poliomyelitis	19(10)	15(4)	8(1)	11(7)	1(1)	4	..	..	58
Puerperal Fever	1	..	1	..	..	..	..	..	2
Rubella	..	30(16)	..	..	3(3)	..	..	..	33
Salmonella Infection	..	..	..	..	2(2)	..	..	..	2
Scarlet Fever	35(15)	79(41)	4(1)	6(5)	4(3)	1	..	..	129
Smallpox	..	..	..	..	..	..	..	..	..
Tetanus	..	..	..	..	..	..	..	..	..
Trachoma	..	..	..	..	..	..	..	..	..
Trichinosis	..	..	..	..	..	..	..	..	..
Tuberculosis	28(25)	13(9)	11(6)	8(4)	3(3)	4	..	..	67
Typhoid Fever	..	..	..	..	..	..	..	..	..
Typhus (Flea-, Mite- and Tick-borne)	..	..	..	..	..	..	..	..	..
Typhus (Louse-borne)	..	..	..	..	..	..	..	..	..
Yellow Fever	..	..	..	..	..	..	..	..	..

[1] Figures in parentheses are those for the metropolitan area.

Melbourne), 1952; Couani, John (M.B., B.S., 1943, Univ. Sydney), D.T.M. and H. (Univ. Sydney), 1949; Selby, George (M.B., B.S., 1946, Univ. Sydney, M.R.C.P. (London), 1950, M.R.C.P. (Edinburgh), 1951), M.R.A.C.P., 1952.

QUEENSLAND.

THE following have been registered, pursuant to the provisions of *The Medical Acts*, 1939-1948, as duly qualified medical practitioners: Hall, Kenneth Macdonald, M.B., B.S., 1953 (Univ. Queensland); Hobbs, Kevin Thomas, M.B., B.S., 1953 (Univ. Queensland).

The following additional qualifications have been registered: Morton, Max Robson, D.T.M. and H. (Univ. Sydney), 1953; Minty, Cyril Charles Julius, D.T.R. (Univ. Melbourne), 1953.

Nominations and Elections.

THE undermentioned has applied for election as a member of the New South Wales Branch of the British Medical Association:

Ravazdy, Stefan, regional registration in Stroud, in accordance with the *Medical Practitioners Act*, 1938-1950, Subsection II, Section 21A (meeting of the Medical Board, March 4, 1953), Stroud, New South Wales.

The undermentioned have been elected as members of the New South Wales Branch of the British Medical Association: Assef, Abraham, M.B., B.S., 1953 (Univ. Sydney); Boyd, Marjorie Stuart, M.B., B.S., 1953 (Univ. Sydney); Daniel, Phillip Mileham, M.B., B.S., 1953 (Univ. Sydney); Gorshenin, Alex Nicholas, M.B., B.S., 1953 (Univ. Sydney); Greive, Ellis Prescott, M.B., B.S., 1953 (Univ. Sydney); Klugman, Richard Emanuel, M.B., B.S., 1953 (Univ. Sydney); May, Richard Walter, M.B., B.S., 1953 (Univ. Sydney); Phillips, Susie Erika, M.B., B.S., 1953 (Univ. Sydney); Royall, Bruce Walter, M.B., B.S., 1953 (Univ. Sydney); Stephen, David Alastair Faussett Deloitte, M.B., B.S., 1953 (Univ. Sydney); Sugerman, David Alexander, M.B., B.S., 1953 (Univ. Sydney); Watson, Ian Leslie, M.B., B.S., 1953 (Univ. Sydney); Cumming, Robert Wellington, M.B., B.S., 1952 (Univ. Sydney); Hornbrook, Alan Francis, M.B., B.S., 1952 (Univ. Sydney); Maginnity, Leo Kevin, M.B., B.S., 1952 (Univ. Sydney); Sidoti, Eric Dominic, M.B., B.S., 1952 (Univ. Sydney).

Medical Appointments.

Dr. H. N. Robson has been appointed an honorary physician at the Royal Adelaide Hospital.

Dr. B. H. Swift has been appointed an honorary consulting gynæcologist at the Royal Adelaide Hospital.

Dr. B. L. Cornish has been appointed resuscitation registrar at the Royal Adelaide Hospital.

Dr. R. O. Mills has been appointed public vaccinator for the Shire of Shepparton, Victoria.

Dr. A. E. Dickmann has been appointed public vaccinator for the City of Shepparton, Victoria.

Dr. S. D. Rubbo and Dr. S. Ormerod have been appointed public vaccinators for the City of Melbourne.

Dr. E. P. Hennessy has been appointed public vaccinator for the Shire of Seymour, Victoria.

Dr. C. J. Cummins has been appointed a member of the New South Wales Film Council, as the representative of the Department of Public Health.

Dr. G. M. W. Clemons and Dr. P. L. Dorney have been appointed members of the Doctors' Wages Board of Tasmania, as representatives of the employers.

Dr. W. E. King has been appointed a member of the Dental Board of Victoria.

Dr. K. Brennan, Dr. R. J. Farnbach, Dr. E. F. Mackenzie, Dr. E. J. Crowe, Dr. N. M. Dalton, Dr. W. J. Stevenson, Dr. N. J. Caldwell, Dr. N. K. Dougan and Dr. P. L. Langton-Lockton have been appointed public vaccinators, Victoria.

Dr. J. J. Donnellan has been appointed a member of the Advisory Committee for the purposes of the *Pure Food Act*, 1908, New South Wales.

Dr. William Hutchison has been appointed as a Quarantine Officer, Northern Territory, under the provisions of the *Quarantine Act*, 1908-1950.

Dr. F. Welch has been appointed medical officer to the Night Clinic (female section) at the Royal Adelaide Hospital.

Dr. D. B. McLeay has been appointed honorary clinical assistant to the surgical section at the Royal Adelaide Hospital.

Dr. R. T. W. Reid has been appointed honorary clinical assistant in pathology at the Royal Adelaide Hospital.

Diary for the Month.

MAY 5.—New South Wales Branch, B.M.A.: Organization and Science Committee.
MAY 6.—Victorian Branch, B.M.A.: Clinical Meeting.
MAY 6.—Western Australian Branch, B.M.A.: Council Meeting.
MAY 7.—South Australian Branch, B.M.A.: Council Meeting.
MAY 8.—Queensland Branch, B.M.A.: General Meeting.
MAY 12.—New South Wales Branch, B.M.A.: Executive and Finance Committee.

Medical Appointments: Important Notice.

MEDICAL PRACTITIONERS are requested not to apply for any appointment mentioned below without having first communicated with the Honorary Secretary of the Branch concerned, or with the Medical Secretary of the British Medical Association, Tavistock Square, London, W.C.1.

New South Wales Branch (Medical Secretary, 135 Macquarie Street, Sydney): All contract practice appointments in New South Wales.

Victorian Branch (Honorary Secretary, Medical Society Hall, East Melbourne): Associated Medical Services Limited; all Institutes or Medical Dispensaries; Australian Prudential Association, Proprietary, Limited; Federal Mutual Medical Benefit Society; Mutual National Provident Club; National Provident Association; Hospital or other appointments outside Victoria.

Queensland Branch (Honorary Secretary, B.M.A. House, 225 Wickham Terrace, Brisbane, B17): Brisbane Associated Friendly Societies' Medical Institute; Bundaberg Medical Institute. Members accepting LODGE appointments and those desiring to accept appointments to any COUNTRY HOSPITAL or position outside Australia are advised, in their own interests, to submit a copy of their Agreement to the Council before signing.

South Australian Branch (Honorary Secretary, 178 North Terrace, Adelaide): All Contract Practice appointments in South Australia.

Western Australian Branch (Honorary Secretary, 205 Saint George's Terrace, Perth): Norseman Hospital; all Contract Practice appointments in Western Australia. All government appointments with the exception of those of the Department of Public Health.

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